# SEQUENCE LISTING A

	• •	
<110>	CANON KABUSHIKI KAISHA	
<120>	Probe set and method for identifying HLA allele	•
<130>	g10003828A	
<150> <151>	JP2003-430553 2003-12-25	
<160>	637	
<170>	PatentIn version 3.2	
<210> <211> <212> <213>	1 897 DNA Homo sapiens	
cagacet cgcgggg gacagcg gacagcg ataatgt gcctacg gacatgg agagtet gagacgc catgagg tgcagc ggggatg tacacet <210> <211> <212> <213> <400> gctcca gcttcatc accagga tgcgcgg gggacgt accagga tgcgcgg gggacgt agagtt	tea tggegeceg aaccetecte etgetaetet egggggeet ggeeetgaee ggg egggeteea etecatgagg tatttettea eateegtgte eeggeegge gage eeggtetea etecatgagg tatttettea eateegtgte eeggeegge gage eeggteteat egeegtggge taegtggaeg acaeggagt egtggataga geaggaggggatt gggae eeggagea gaaaggaggg eeggaee eeggggee eateaaaac eagageggg egga eeteggagg etaetaeaac eagagegagg acggttetea eaceateeag atg getgegaetg ggggeeggae ggggeettee teegeggta eeggaaggae acggaaggatta eategeetg aacgaggagg eteagaaggatta eategeetg aacgaggaeet teetegeggta eeggaaggaeggag eeggaaggaggaggaggeggaaggaggageggaaggagga	300 360 420 480 540 600 660 720 780 840 897
<210><211>	ggtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc  3 897	540 546
<212> <213>	DNA Homo sapiens	•

atggccgtca tggcgccccg aaccetecte etgetaetet egggggecet ggccetgaee	60
	l <b>2</b> 0
agtggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc	180
gacagegaeg cegegageca gaagatggag cegegggege egtggataga geaggagggg	240
ccggagtatt gggaccagga gacacggaat atgaaggccc actcacagac tgaccgagcg	300
aacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccatccag	360
ataatgtatg gctgcgacgt ggggccggac gggcgcttcc tccgcgggta ccggcaggac	420
gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcttg gaccgcggcg	480
gacatggcag ctcagatcac caagcgcaag tgggaggcgg tccatgcggc ggagcagcgg	<b>54</b> 0
agagtetace tggagggeeg gtgegtggae gggeteegea gatacetgga gaa'egggaag	600
gagacgetge agegeaegga ecceeccaag acacatatga eccaecacce catetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca	<b>7</b> 80
ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaga ggagcagaga	840
tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag	897

<210> 4

<211> 546

<212> DNA

<213> Homo sapiens

### <400> 4

60 geteceacte catgaggtat ttetteacat eegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagaa gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accaggagac acggaatatg aaggcccact cacagactga ccgagcgaac ctggggaccc tgcgcggcta ctacaaccag agcgaggacg gttctcacac catccagatg atgtatggct gegacgtggg geeggacggg egetteetee gegggtaceg geaggacgee tacgacggea aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcagctc agatcaccaa gcgcaagtgg gaggcggtcc atgcggcgga gcagcggaga gtctacctgg agggccggtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 5

<211> 546

<212> DNA

<213> Homo sapiens

### <400> 5

60 geteceacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagaa gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accaggagac acggaatatg aaggeceact cacagactga ccgagcgaac ctggggacce tgegeggeta etacaaceag agegaggaeg gtteteacae cateeagata atgtatgget 300 gcgacgtggg gccggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcagctc 420 agatcaccaa gcgcaagtgg gaggcggtcc atgcggcgga gcagttgaga gcctacctgg agggccggtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 6

<211> 546

<212> DNA

<213> Homo sapiens

<400> 6

120

300

**420** 

360

180

240

480

540

180 240

360

480

540 546

getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg	120
cgagccagaa gatggagccg cgggcgccgt ggatagagca ggagaggcct gagtattggg	180
accaggagac acggaatgtg aaggcccact cacagactga ccgagagaac ctggggaccc	<b>24</b> 0
tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagata atgtatggct	300
gcgacgtggg gccggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca	360
aggattacat egecetgaac gaggacetge getettggae egeggeggae atggeagete	420
agatcaccaa gegeaagtgg gaggeggtee atgeggegga geageggaga gtetacetgg	<b>48</b> 0
agggccggtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc	<b>540</b>
gcacgg	<b>546</b>

<210> 7 <211> 546

<212> DNA

<213> Homo sapiens

### <400>

geteceacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageece getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagaa gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accaggagac acggaatatg aaggcccact cacagactga ccgagcgaac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggacg gttctcacac catccagata atgtatggct gcgacgtggg gccggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcagctc agatcaccaa gcgcaagtgg gaggcggtcc atgcggcgga gcagcggaga gtctacctgg agggetggtg egtggaeggg etcegeagat acetggagaa egggaaggag aegetgeage gcacgg

> 360 420 480

> > 540 546

<210> 8 <211> 897 <212> DNA <213> Homo sapiens

### <400>

60 atggccgtca tggcgccccg aaccetecte etgetaetet egggggccet ggccctgaec 120 cagacetggg egggetecca etecatgagg tatttettea eateegtgte eeggeeegge cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt agtgcggttc gacagcgacg ccgcgagcca gaagatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccagga gacacggaat atgaaggccc actcacagac tgaccgagcg aacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccatccag ataatgtatg getgegaegt ggggeeggae gggegettee teegegggta eeggeaggae gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcttg gaccgcggcg gacatggcag ctcagatcac caagcgcaag tgggaggcgg tccatgcggc ggagcagcgg agagtetace tggagggeeg gtgcgtggae gggeteegea gatacetgga gaaegggaag gagacgetge agegeaegga ecceeccaag acacatatga eccaecace catetetgae catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaga ggagcagaga tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag 897

> 660 780 840

<210> 9 <211> 897 <212> DNA <213> Homo sapiens

<400> 9

atggccgtca tggcgccccg aaccetcgtc ctgctactct cgggggctct ggccctgacc  ${\tt cagacctggg}\ {\tt cgggctctca}\ {\tt ctccatgagg}\ {\tt tatttcttca}\ {\tt catccgtgtc}\ {\tt ccggcccggc}$ 

300

480

720

840

875

780

540

600

240

cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc	180
gacagegaeg cegegageca gaggatggag cegegggege egtggataga geaggagggt	240
ccggagtatt gggacgggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg	300
gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccgtccag	360
aggatgtatg gctgcgacgt ggggtcggac tggcgcttcc tccgcgggta ccaccagtac	420
gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg	480
gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagttg	<b>540</b>
agagectace tggagggeae gtgcgtggag tggeteegea gatacetgga gaaegggaag	600
gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae	660
catgaagcca ccctgaggtg ctgggccctg agettctacc ctgcggagat cacactgacc	720
tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca	780
ggggatggaa cettccagaa gtgggcgget gtggtggtge ettetggaca ggagcagaga	840
tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag	897

<210> 10

<211> 546

<212> DNA

<213> Homo sapiens

<400> 10gctcccactc catgaggtat ttcttcacat ccgtgtcccg gcccggccgc ggggagcccc 60 120 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg 180 acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc 240 tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct 300 gegacgtggg gteggactgg egetteetee gegggtacea eeagtaegee tacgacggea 360 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc 420 480 agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg 540 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcacgg

<210> 11

<211> 875

<212> DNA

<213> Homo sapiens

<400>

60 aaccetegte etgetaetet egggggetet ggeeetgace eagacetggg egggetetea 120 egeagtggge taegtggaeg acaegcagtt egtgeggtte gaeagegaeg eegegageea gaggatggag ccgcgggcgc cgtggataga gcaggagggt ccggagtatt gggacgggga gacacggaaa gtgaaggccc actcacagac tcatcgagtg gacctgggga ccctgcgcgg 360 ctactacaac cagagegagg ceggttetea cacegtecag aggatgtatg getgegaegt ggggtcggac tggcgcttcc tccgcgggta ccaccagtac gcctacgacg gcaaggatta 420 categeeetg aaagaggace tgegetettg gacegeggeg gacatggeag etcagaceae caagcacaag tgggaggcgg cccatgtggc ggagcagttg agagcctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag gagacgctgc agcgcacgga 660 egececcaaa aegeatatga eteaceaege tgtetetgae eatgaageea eeetgaggtg ctgggccctg agettctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa ccttccagaa gtgggcggct gtggtggtgc cttctggaca ggagcagaga tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atggg

<210> 12

<211> 546

<212> DNA

<213> Homo sapiens

300

360

600

660 720

780

822

120 180

300

360 420

600

660 720

780

822

240

480 540

420

480

540

180

240

<400> 12	
geteteacte catgaggtat ttetteacat eegtgteeeg geceggeege ggggageeee	60
getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg	120
cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg	180
acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc	240
tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct	300
gcgacgtggg gtcggactgg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca	360
aggattacat cgccctgaaa gaggacctgc gctcttggac cgcagcggac atggcagctc	420
agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg	480
agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	540
gcacgg	546

<210> 13 <211> 822 <212> DNA

<213> Homo sapiens

### <400> 13

geteteacte catgaggtat ttetteacat cegtgteeeg geceggeege ggggageece 60 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct gegacgtggg gteggactgg egetteetee gegggtacea eeagtaegee tacgaeggea aggattacat cgccctgaaa gaagacctgc gctcttggac cgcggcggac atggcagetc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc geaeggaege ecceaaaaeg catatgaete accaegetgt etetgaecat gaageeaece tgaggtgctg ggccctgagc ttctaccctg cggagatcac actgacctgg cagcgggatg gggaggacca gacccaggac acggagctcg tggagaccag gcctgcaggg gatggaacct tccagaagtg ggcggctgtg gtggtgcctt ctggacagga gcagagatac acctgccatg tgcagcatga gggtttgccc aagcccctca ccctgagatg gg

<210> 14 822 <211> <212> DNA <213> Homo sapiens

### <400>

geteteacte catgaggtat ttetteacat eegtgteeeg geeeggeege ggggageeee 60 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct gcgacgtggg gtcggactgg cgattcctcc gcgggtacca ccagtacgcc tacgacggca aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc geacggacge ecceaaaacg catatgacte accaegetgt etetgaceat gaagecaeee tgaggtgctg ggccctgagc ttctaccctg cggagatcac actgacctgg cagcgggatg gggaggacca gacccaggac acggagctcg tggagaccag gcctgcaggg gatggaacct tecagaagtg ggeggetgtg gtggtgeett etggacagga gcagagatac acetgccatg tgcagcatga gggtttgccc aagcccctca ccctgagatg gg

<210> 15 <211> 822 <212> DNA

120

300

360

600 660

420

480

540

720

180

240

480

540

720

780

822

60

120

360

420

600

660 720

780

480

540

180

240 300

780 822

180

240

#### <213> Homo sapiens

<400> geteteacte catgaggtat ttetteacat cegtgteeeg geeeggeegt ggggageeee getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct gegacgtggg gteggactgg egetteetee gegggtacea eeagtaegee taegaeggea aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacggacgc ccccaaaacg catatgactc accacgctgt ctctgaccat gaagccaccc tgaggtgetg ggccetgage ttetaccetg eggagateae aetgacetgg eagegggatg gggaggacca gacccaggac acggagetcg tggagaccag gcctgcaggg gatggaacct tccagaagtg ggcggctgtg gtggtgcctt ctggacagga gcagagatac acctgccatg tgcagcatga gggtttgccc aagcccctca ccctgagatg gg

<210> 16 <211> 822

<212> DNA

<213> Homo sapiens

### <400> 16

geteteacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageece 60 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc 300 tgegeggeta etacaaccag agegaggeeg gtteteacae egteeagagg atgtatgget  ${\tt gcgacgtggg\ gtcggactgg\ cgcttcctcc\ gcgggtacca\ ccagtacgcc\ tacgacggca}$ 360 420 aggattacat cgccetgaaa gaggacetge getettggae egeggeggae atggeagete agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 600 gcacggacgc ccccaaaacg catatgactc accacgctgt ctctgaccat gaagccaccc 660 tgaggtgctg ggccctgagc ttctaccctg cggagatcac actgacctgg cagcgggatg gggaggacca gacccaggac acagagcteg tggagaccag gcctgcaggg gatggaacct tccagaagtg ggcggctgtg gtggtgcctt ctggacagga gcagagatac acctgccatg tgcagcatga gggtttgccc aagcccctca ccctgagatg gg

<210> 17

<211> 822

<212> DNA

<213> Homo sapiens

## <400> 17

geteteacte catgaggtat ttetteacat cegtgteecg geeeggeege ggggageece getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc tgegeggeta etacaaccag agegaggeeg gtteteacae egteeagagg atgtatgget gcgacgtggg gtcggactgg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc geacggacge ecceaaaacg catatgacte accaegetgt etetgaceat gaagecaece tgaggtgctg ggccctgagc ttctaccctg cggagatcac actgacctgg cagcgggatg gggaggacca gacccaggac acggagctcg tggagaccag gcctgcaggg gatggaacct tccagaagtg ggcggctgtg gtggtgcctt ctggacagga gcagagatac acctgccatg

	•		
tgcagca	tga gggtttgccc aagcccctca ccctgagatg gg	822	
<210>	18		
<211>	822		
<212>	DŅA		
<213>	Homo sapiens		
<400>	18		
	te catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageece	60	
	ge agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg	120	
	gag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg	180	
	igac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc	240	
	cta ctacaaccag agcgaggccg gttctcacac cctccagagg atgtatggct	300	
	ggg gtcggactgg cgcttcctgc gcgggtacca ccagtacgcc tacgacggca	360	
	cat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc	420	
	caa gcacaagtgg gaggcggccc atgtggcgga gcagtggaga gcctacctgg	480	
	gtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	<b>54</b> 0	
gcacgga	cgc ccccaaaacg catatgactc accacgetgt etetgaccat gaagccacce	600	
	ctg ggccctgagc ttctaccctg cggagatcac actgacctgg cagcgggatg	<b>66</b> 0	
	acca gacccaggac acggageteg tggagaccag geetgeaggg gatggaacet	720	
	gtg ggcggctgtg gtggtgcctt ctggacagga gcagagatac acctgccatg	780	
tgcagca	tga gggtttgccc aagcccctca ccctgagatg gg	822	
<210>	19		
<211>	897		
<212>	DNA		
<213>	Homo sapiens		
<400>	19		
	tea tggegeeeeg aaccetegte etgetaetet egggggetet ggeeetgaee	60	
		120	
	age eccepticat egeagtggge taegtggaeg acaegcagtt egtgeggtte	180	
	acg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggt	240	
	att gggacgggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg	300	
	gga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccgtccag	360	
	atg gctgcgacgt ggggtcggac tggcgcttcc tccgcgggta ccaccagtac	420	
	acg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg	480	
	cag ctcagaccac caagcacaag tgggagacgg cccatgaggc ggagcagtgg	<b>54</b> 0	
agagcct	acc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag	600	
	tgc agcgcacgga cgcccccaaa acgcatatga ctcaccacgc tgtctctgac	660	
catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc 720			
tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca 780			
	ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaca ggagcagaga 840		
tacacctg	gcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag	897	
<210>	20	•	
<211>	897		
<212>	DNA		

<212> DNA <213> Homo sapiens

<400> 20atggccgtca tggcgcccg aaccetegte etgetaetet egggggetet ggccetgace **6**0 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 180 240  ${\tt gacagcgacg}\ {\tt ccgcgagcca}\ {\tt gaggatggag}\ {\tt ccgcgggcgc}\ {\tt cgtggataga}\ {\tt gcaggagggt}$ 300 ccggagtatt gggacgggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg gacetgggga ecetgegegg etaetacaac eagagegagg eeggttetea eacegteeag 360 atgatgtatg getgegacgt ggggteggac tggegettee teegegggta ceaccagtae 420 480 gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg 540 gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagttg

300

540

600

780

840

180 240

360

420

480

540

600 660

> 780 840

897

300

600 agagcctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 660 gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc 720 780 tggcagcggg atggggggga ccagacccag gacacggagc tcgtggagac caggcctgca 840 ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaca ggageagaga 897 tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

<210> 21

<211> 897

<212> DNA

<213> Homo sapiens

#### <400> 21

60 atggccgtca tggcgccccg aaccctcgtc ctgctactct cggggggctct ggccctgacc 120 cagacetggg egggetetea etceatgagg tatttetaea eetcegtgte eeggeeegge cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 180 gacagcgacg ccgcgagccg gaggatggag ccgcgggcgc cgtggataga gcaggagggt ccggagtatt gggacggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg gacetgggga ceetgegegg etactacaac cagagegagg eeggttetea caccetecag 360 420 aggatgtatg getgegaegt ggggteggae tggegettee tgegegggta ceaccagtae 480 gcctacgacg gcaaggatta categecetg aaagaggace tgcgctettg gaccgcggcg gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagtgg agageetace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 660 gagacgetge agegeaegga egececeaaa aegeatatga eteaeeaege tgtetetgae 720 catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atgggggga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggcgget gtggtggtge ettetggaca ggagcagaga tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag 897

<210> 22

<211> 897

<212> DNA

<213> Homo sapiens

## <400>

atggccgtca tggcgccccg aaccetegte etgetaetet egggggetet ggccctgace 60 cagacetggg egggetetea etceatgagg tatttetaea eetcegtgte eeggeeegge 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagegaeg cegegageca gaggatggag cegegggege egtggataga geaggagggt ccggagtatt gggacggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccgtccag aggatgtatg gctgcgacgt ggggtcggac tggcgcttcc tccgcgggta ccaccagtac gcctacgacg gcaaggatta catcgcctg aaagaggacc tgcgctcttg gaccgcggcg gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagttg agagcetace tggagggeae gtgcgtggag tggctccgca gatacetgga gaacgggaag gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggggggga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaca ggagcagaga tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

<210> 23

<211> 897

DNA <212>

<213> Homo sapiens

atggccgtca tggcgccccg aaccctcgtc ctgctactct cgggggctct ggccctgacc	60
	.20
cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc	180
gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggt	240
ccggagtatt gggacgggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg	300
gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccgtccag	360
aggatgtgtg gctgcgacgt ggggtcggac tggcgcttcc tccgcgggta ccaccagtac	420
gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg	480
gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagttg	<b>540</b>
agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaacgggaag	600
gagacgetge agegeaegga egececeaaa aegeatatga etcaceaege tgtetetgae	660
catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca	780
ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaca ggageagaga	840
tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag	897

<210> 24

<211> 550

<212> DNA

<213> Homo sapiens

### <400>

tgggcgggct ctcactccat gaggtatttc tacacctccg tgtcccggcc cggccgcggg 60 120 gagccccgct tcatcgcagt gggctacgtg gacgacacgc agttcgtgcg gttcgacagc gacgccgcga gccggaggat ggagccgcgg gcgccgtgga tagagcagga gggtccggag tattgggacg gggagacacg gaatgtgaag gcccactcac agactcaccg agtggacctg 240 gggaccetge geggetaeta caaccagage gaggeeggtt etcacaccet ecagaggatg 300 tatggctgcg acgtggggtc ggactggcgc ttcctgcgcg ggtaccacca gtacgcctac 360 420 gacggcaagg attacatcgc cctgaaagag gacctgcgct cttggaccgc ggcggacatg gcageteaga ecaceaagea eaagtgggag geggeecatg tggeggagea gtggagagee tacctggagg gcacgtgcgt ggagtggctc cgcagatacc tggagaacgg gaaggagacg ctgcagcgca

180

480

540 550

240

300

**540** 

600

780

840

<210> 25

<211> 897

<212> DNA

<213> Homo sapiens

## <400> 25

**6**0 atggccgtca tggcgcccg aaccetcgtc ctgctactct cgggggctct ggccctgacc 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 180 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggt ccggagtatt gggacggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg 360 gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccgtccag aggatgtatg getgegacgt ggggteggac tggegettee teegegggta ceaccagtae 420 480 gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagttg agagcctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 660 gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae 720 catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggggga ccagacccag gacacggagc tcgtggagac caggcctgaa ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaca ggagcagaga 897 tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

<210> 26

<211> 897

<212> DNA

#### <213> Homo sapiens

<400> 26

60 atggccgtca tggcgcccg aaccetcgte etgetaetet egggggetet ggccetgaec 120 cagacetggg egggetetea etecatgagg tatttetaea eeteegtgte eeggeeegge 180 egeggggage ceegetteat egeagtggge taegtggaeg acaegcagtt egtgeggtte 240 gacagegaeg cegegageca gaggatggag cegegggege egtggataga geaggagggt 300 ccggagtatt gggacgggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccgtccag 360 420 aggatgtttg getgegaegt ggggteggae gggegettee teegegggta ceaceagtae 480 geetacgaeg geaaggatta eategeeetg aaagaggaee tgegetettg gaeegeggeg gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagttg 540 600 agagcetace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae 660 720 catgaageca ccctgaggtg ctgggccctg agettetace ctgcggagat cacactgace 780 tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca 840 ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaca ggagcagaga 897 tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

<210> 27

<211> 897

<212> DNA

<213> Homo sapiens

### <400>

60 atggccgtca tggcgccccg aaccctcgtc ctgctactct cggggggctct ggccctgacc 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagegaeg cegegageca gaggatggag cegegggege egtggataga geaggagggt ccggagtatt gggacgggga gacacggaaa gtgaaggccc actcacagat tgaccgagtg gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccgtccag aggatgtatg getgegacgt ggggteggac tggegettee teegegggta ceaecagtae gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagttg agagectace tggagggeae gtgcgtggag tggeteegea gatacetgga gaaegggaag gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae 720 catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggggga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaca ggageagaga tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

180

360

420 480

660

240

300

540

600

780

240

300 360

> 540 600

480

660

840

897

28 <210>

<211> 897

<212> DNA

<213> Homo sapiens

### <400>

atggccgtca tggcgccccg aaccctcgtc ctgctactct cgggggctct ggccctgacc **6**0  ${\tt cagacetggg}\ {\tt cgggetetca}\ {\tt ctccatgagg}\ {\tt tattettca}\ {\tt catccgtgte}\ {\tt ccggecegge}$ 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 180 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggt ccggagtatt gggacgggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccgtccag 420 aggatgtatg getgegacgt ggggteggac tggegettee teegegggta ceaccagtae gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg gacatggeag etcagaceae caagcacaag tgggaggegg eccatgtgge ggagcageag agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaacgggaag gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae

540

780

60

840

600

480

catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggggggga ccagacccag gacacggagc tcgtggagac caggcctgca 840 ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaca ggagcagaga 897 tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

<210> 29 897 <211>

<212> DNA

<213> Homo sapiens

<400>

atggccgtca tggcgccccg aaccetcgtc ctgctactct cggggggctct ggccctgacc 60 120 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggt ccggagtatt gggacgggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg 360 gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccgtccag 420 aggatgtatg gctgcgacgt ggggtcggac tggcgcttcc tccgcgggta ccaccagtac gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgaggc ggagcagcag agagectacc tggagggeac gtgcgtggag tggctccgca gatacctgga gaacgggaag 660 gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae  $cat gaag c ca \ ccct gagg t g \ ctg gg ccct g \ ag ctt ctacc \ ctg c g gag at \ cac act gac c$ 720 tggcageggg atggggagga ccagaeccag gacaeggage tegtggagae eaggeetgea ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaca ggagcagaga tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag 897

<210> 30

<211> 892

<212> **DNA** 

<213> Homo sapiens

<400> 30cgtcatggcg ccccgaaccc tcgtcctgct actctcgggg gctctggccc tgacccagac 120 ctgggcggc tctcactcca tgaggtattt ctacacctcc gtgtcccggc ccggccgcgg 180 ggagccccgc ttcatcgcag tgggctacgt ggacgacacg cagttcgtgc ggttcgacag 240 cgacgccgcg agccggagga tggagccgcg ggcgccgtgg atagagcagg agggtccgga 300 gtattgggac ggggagacac ggaaagtgaa ggcccactca cagactcacc gagtggacct 360 ggggaccetg cgcggctact acaaccagag cgaggccggt tctcacaccc tccagaggat 420 gtatggctgc gacgtggggt cggactggcg cttcctgcgc gggtaccacc agtacgccta 480 cgacggcaag gattacatcg ccctgaaaga ggacctgcgc tcttggaccg cggcggacat 540 ggeageteag accaecaage acaagtggga ggeggeeeat gtggeggage agttgagage ctacctggag ggcacgtgcg tggagtggct ccgcagatac ctggagaacg ggaaggagac 600 getgeagege aeggaegeee ecaaaaegea tatgaeteae eaegetgtet etgaeeatga 660 agccaccctg aggtgctggg ccctgagett ctaccctgcg gagatcacac tgacctggca 720 780 gcgggatggg gaggaccaga cccaggacac ggagctcgtg gagaccaggc ctgcagggga tggaacette cagaagtggg eggetgtggt ggtgeettet ggacaggage agagatacae 840 892 ctgccatgtg cagcatgagg gtttgcccaa gcccctcacc ctgagatggg ag

<210> 31

<211> 897

<212> **DNA** 

<213> Homo sapiens

<400>

atggccgtca tggcgccccg aaccetcgte etgetaetet egggggetet ggccetgaec cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc

60 120

360

480

540

600 660

780

840

420

720

897

180

360

480

660

540

600

240 300

240 300

32 <210> <211> 897 <212> **DNA** 

<213> Homo sapiens

<400>

60 atggccgtca tggctccccg aaccetegte etgetaetet egggggetet ggccetgace 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagegacg cegegageca gaggatggag cegegggege egtggataga geaggagggt ccggagtatt gggacgggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccctccag atgatgtttg gctgcgacgt ggggtcggac tggcgcttcc tccgcgggta ccaccagtac gcctacgacg gcaaggatta categeeetg aaagaggace tgegetettg gaeegeggeg gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagttg agagcetace tggagggeae gtgcgtggag tggeteegea gatacetgga gaaegggaag gagacgetge agegeaegga egececeaaa aegeatatga etcaceaege tgtetetgae catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaca ggagcagaga tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

<210> 33 <211> 781 <212> **DNA** <213> Homo sapiens

<400> 33

60 atggccgtca tggcgccccg aaccetcgtc ctgctactct cgggggctct ggccctgacc 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggt ccggagtatt gggacggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccctccag atgatgtttg getgegaegt ggggteggae tggegettee teegegggta ceaccagtae 420 gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagttg agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag gagacgetge agegeacgga egececeaaa aegeatatga eteaceaege tgtetetgae 720 catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggggga ccagacccag gacacggagc tcgtggagac caggcctgca

300

540

600

780 840

180

240

480

540

546

546

897 <211> DNA <212>

<213> Homo sapiens

<400> 34

60 atggccgtca tggcgccccg aaccctcgtc ctgctactct cgggggctct ggccctgacc 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 180 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggt ccggagtatt gggacgggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg 360 gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccgtccag 420 aggatgtgtg getgegaegt ggggteggae tggegettee teegegggta ceaceagtae 480 gectacgacg geaaggatta categeeetg aaagaggace tgegetettg gacegeggeg gacaaggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagttg agagcetace tggagggcae gtgcgtggag tggctccgca gatacetgga gaacgggaag 660 gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae 720 catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcageggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaca ggagcagaga 897 tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

<210> 35

<211> 546

<212> DNA

<213> Homo sapiens

<400>

60 geteteacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageece 120 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct 300 360 gcgacgtggg gtcggactgg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccaa gcgcaagtgg gaggcggccc atgtggcgga gcagcagaga gcctacctgg agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 36

<211> 546

<212> DNA

<213> Homo sapiens

<400>

geteteacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageeee 60 120 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg acggggagac acggaatgtg aaggcccact cacagactca ccgagtggac ctggggaccc 240 tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct 300 360 gegacgtggg gteggactgg egetteetee gegggtacea ceagtaegee tacgaeggea 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg 480 540 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

37 <210>

546

<211>

<212> DNA

<213> Homo sapiens

<400>

geteteacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageece 60 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg 180 240 acggggagac acggaacgtg aaggcccact cacagactca ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct 360 gegaegtggg gteggaetgg egetteetee gegggtaeca eeagtaegee taegaeggea 420 aggattacat egecetgaaa gaggacetge getettggae egeggeggae atggeagete agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg 480 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 546 gcacgg

<210> 38

<211> 897

<212> DNA

<213> Homo sapiens

<400> 38

60 atggccgtca tggcgccccg aaccetcgtc ctgctactct cgggggctct ggccctgacc 120 cagacetggg egggetetea etceatgagg tatttetaca eetcegtgte eeggeeegge egeggggage eeegetteat egeagtggge taegtggaca acaegcagtt egtgeggtte gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggt ccggagtatt gggacgggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccgtccag aggatgtatg getgegaegt ggggteggae tggegettee teegegggta ceaceagtae geetaegaeg geaaggatta eategeettg aaagaggaee tgegetettg gaeegeggeg gacatggcag etcagaccae caagcacaag tgggaggegg eccatgtgge ggagcagttg agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaca ggagcagaga tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

<210> 39

897 <211>

<212> DNA

<213> Homo sapiens

<400>

atggccgtca tggcgccccg aaccctcgtc ctgctactct cgggggctct ggccctgacc cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggt ccggagtatt gggacgggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg gacetgggga ceetgegegg etactacaac cagagegagg ceggttetea cacegtecag aggatgtatg gctgcgacgt ggggtcggac tggcgcttcc tccgcgggta ccaccagtac gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagtgg agagcetace tggagggeae gtgcgtggag tggctccgca gatacetgga gaacgggaag gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggcgget gtggtggtge ettetggaca ggagcagaga tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

60 120 180

180

360

420

480

660

897

540

600

780 840

240

300

240 300 360

420 480

540 600 660

720

180

240

480

540

120

300

360

60

180

240

300

360

480

540 600

780

840

891

420

660

720

420

480

540 546

180

240

546

<210> 40 546 <211> <212> DNA <213> Homo sapiens

<400> 40gctctcactc catgaggtat ttcttcacat ccgtgtcccg gcccggccgc ggggagcccc getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg ga'gtattggg acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct 360 gcgacgtggg gtcggactgg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcagctc 420 agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 41

<211> 546

<212> DNA

<213> Homo sapiens

#### <400> 41

60 geteteacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct gegaegtggg gteggaetgg egetteetee gegggtaeca ceagtaegee taegaeggea aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagetc agaccaccaa gcacaagtgg gagacggccc atgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc

<210> 42

<211> 891

<212> DNA

<213> Homo sapiens

### <400>

gtcatggcgc cccgaaccct cgtcctgcta ctctcggggg ctctggccct gacccagacc tgggeggget etcaetecat gaggtattte tteacatecg tgteeeggee eggeegggg 120 gageceeget teategeagt gggetaegtg gaegaeaege agttegtgeg gttegaeage gacgccgcga gccagaggat ggagccgcgg gcgccgtgga tagagcagga gggtccggag tattgggacg gggagacacg gaaagtgaag gcccactcac agactcaccg agtggacctg gggaccetge geggetaeta caaccagage gaggeeggtt etcacacegt ceagaggatg tatggctgcg acgtggggtc ggactggcgc ttcctccgcg ggtaccacca gtacgcctac gacggcaagg attacatcgc cctgaaagag gacctgcgct cttggaccgc ggcggacatg gcagctcaga ccaccaagca caagtgggag gcggcccatg aggcggagca gttgagagcc tacetggagg geacgtgcgt ggagtggctc cgcagatacc tggagaacgg gaaggagacg ctgcagcgca cggacgcccc caaaacgcat atgactcacc acgctgtctc tgaccatgaa gccaccctga ggtgctgggc cctgagcttc taccctgcgg agatcacact gacctggcag cgggatgggg aggaccagac ccaggacacg gagctcgtgg agaccaggcc tgcaggggat ggaacettee agaagtggge ggetgtggtg gtgeettetg gacaggagea gagatacace tgccatgtgc agcatgaggg tttgcccaag cccctcaccc tgagatggga g

540

546

300

360

420 480

<210> 43 <211> 546 <212> DNA <213> Homo sapiens <400> 43 60 geteteacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageeee 120 getteatege agtgggetae gtggacgaca egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg 180 acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc 240 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct gegacgtggg gteggactgg egetteetee gegggtaeca ceagtaegee taegaeggea 360 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc 480 agaccaccaa gcacaagtgg gaggcggccc atgcggcgga gcagcagaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc **54**0 gcacgg 546 <210> 44 <211> 546 <212> DNA <213> Homo sapiens <400> 44 60 geteteacte catgaggtat ttetacacet eegtgteeeg geeeggeege ggggageeee 120 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagagtccg gagtattggg 180 acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc 240 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct 360 gegacgtggg gteggactgg egetteetee gegggtaeca ceagtaegee taegaeggea 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc 480 agaccaccaa gcacaagtgg gaggcggcc atgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 gcacgg 546 <210> 45 <211> 546 <212> DNA <213> Homo sapiens <400> 45 60 geteteacte catgaggtat ttetteacat cegtgteceg geceggeege ggggageece 120 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 180

<210> 46 <211> 897

<212> DNA

<213> Homo sapiens

atggccgtca tggcgccccg aaccctcgtc ctgctactct cgggggctct ggccctgacc 60 cagacetggg egggetetea gtecatgagg tatttettea cateegtgte eeggeeegge 120 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggt 240 ccggagtatt gggacgggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg 300 gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccgtccag 360 aggatgtatg getgegacgt ggggteggac tggegettee teegegggta ecaceagtae 420 480 gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg 540 gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagttg agagectace tggagggeac gtgegtggag tggeteegea gatacetgga ga'acgggaag 600 660 gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae 720 catgaagcca ccctgaggtg ctgggccctg agettctacc ctgcggagat cacactgacc 780 tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca 840 ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaca ggagcagaga 897 tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

<210> 47 <211> 546

<212> DNA

<213> Homo sapiens

#### <400> 47

60 geteteacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageece getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg ggagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct gcgacgtggg gtcggactgg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc

120 180

300

360

420

480

540 546

240 300

360

480

660

540

600

780

840

240

<210> 48

<211> 897

<212> DNA

<213> Homo sapiens

## <400>

60 atggccgtca tggcgccccg aaccctcgtc ctgctactct cggggggctct ggccctgacc 120 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggt ccggagtatt gggacggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg gacetgggga ecetgegegg etaetaeaac eagagegagg eeggttetea eacegteeag 420 aggatgtctg gctgcgacgt ggggtcggac tggcgcttcc tccgcgggta ccaccagtac gcctacgacg gcaaggatta categeeetg aaagaggace tgegetettg gacegeggeg gacatggcag etcagaccac caagcacaag tgggaggcgg eccatgtgge ggagcagttg agageetaee tggagggeae gtgegtggag tggeteegea gataeetgga gaaegggaag gagacgetge agegeacgga egececeaaa aegeatatga eteaceaege tgtetetgae 720 catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa ccttccagaa gtgggcggct gtggtggtgc cttctggaca ggagcagaga 897 tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

<210> 49 <211> 822

240

480

540

720

180

240

480

540 546

<212> **DNA** 

<213> Homo sapiens

<400> 49

geteteacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageece 60 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg acggggagac acggaaagtg aaggcccagt cacagactca ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct 360 gegaegtggg gteggaetgg egetteetee gegggtaeca ceagtaegee taegaeggea 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacggacgc ccccaaaacg catatgactc accacgctgt ctctgaccat gaagccaccc 600 tgaggtgctg ggccctgagc ttctaccctg cggagatcac actgacctgg cagcgggatg 660 gggaggacca gacccaggac acggagctcg tggagaccag gcctgcaggg gatggaacct 780 tccagaagtg ggcggctgtg gtggtgcctt ctggacagga gcagagatac acctgccatg 822 tgcagcatga gggtttgccc aageccctca ccctgagatg gg

<210> 50

<211> 546

<212> DNA

<213> Homo sapiens

60 <400> 50gctctcactc catgaggtat ttcttcacat ccgtgtcccg gcccggccgc ggggagcccc getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg 240 acggggagac acggaaagtg aaggcccagt cacagactga ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct 360 gcgacgtggg gtcggactgg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggeggccc atgtggegga gcagttgaga gcctacctgg 480 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 546 gcacgg

<210> 51

<211> 546

<212> DNA

<213> Homo sapiens

### <400> 51

60 geteteacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageeee 120 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct 300 gegacgtggg gteggactgg egetteetee gegggtacea ceagtaegee taegaeggea 360 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggcc atgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 52

<211> 546

<212> DNA

<213> Homo sapiens

<400> 52 geteteacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageece getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egageeagag gatggageeg egggegeegt ggatagagea ggagggteeg gagtattggg aeggggagae aeggaaagtg aaggeeeact cacagaetea eegagtggae etggggaeee tgegeggeta etacaaecag agegaggeeg gtteteacae egteeagag atgtatgget gegaegtggg gteggaetgg egetteetee gegggtaeea ecagtaegee taegaeggea aggattaeat egeeetgaaa gaggaeetge getettggae egeggeggae atggeagete agaeeacaea geacaagtgg gaggegeee atgtggegga geageagaag geetaeetgg agggeaegtg egtggaegg eteegaegga acgggaaggaa egggaagga geggaegge	60 120 180 240 300 360 420 480 540 546
<210> 53 <211> 546 <212> DNA <213> Homo sapiens	
<400> 53 geteteacte catgaggtat tetteacat cegtgteeeg geeeggeege ggggageece getteatege agtgggetae gtggacgaca egeagttegt geggttegae agegaegeeg egageeagag gatggagee egggegeegt ggatagagea ggagggteeg gagtattgggaeggggagae acgggaaagtg aaggeeeact cacagactea eegagtggae etggggaeee tgegeggeta etacaaccag agegaggeeg gteteacae egtecagagg atgtatgget gegaegtggg gteggaetgg egetteetee gegggtaeea ecagtaegee taegaeggea aggattaeat egeeetgaaa gaggaeetge getetttgae egeggeggae atggeagete agaeeacaa geacaagtgg gagaeggeee atgaggegga geageagaa geetaeetggaggaeggeeggtg egtggagtgg eteegeagat acetggagaa egggaaggag acgetgeage geaggagggg	60 120 180 240 300 360 420 480 540 546
<210> 54 <211> 546 <212> DNA <213> Homo sapiens	
<400> 54 geteteacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggacgaca egeagttegt geggttegae agegaegeeg egageeagag gatggageeg egggeeget ggatagagea ggagggteeg gagtattggg aeggggagae aeggaaagtg aaggeeeact cacagactea eegagtggae etgggageee tgggeggeta etacaaceag agegaggeeg gtteteacae egteeagag atgtttgget gegaegtgg gteggaeggg egetteetee gegggtaeea eaggattaeat egeeetgaaa gaggaeetg getettgae egeggegae atggeggea aggattaeat egeeetgaaa gaggaeete getettgae egeggegae atggeggete agateaceaa geacaagtgg gaggeggeee atgtggegga geagttgaga geetaeetgg agggeaegtg egtggagtgg eteegeagat acetggagaa egggaaggag aegetgeage geaegg	60 120 180 240 300 360 420 480 540 546
<210> 55 <211> 546 <212> DNA <213> Homo sapiens	
<400> 55 geteteacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egageeagag gatggageeg egggegeegt ggatagagea ggagggteeg gagtattggg aeggggagae aeggaaagtg aaggeeeact cacagaetea eegagtggae etggggaece tgegeggeta etacaaceag agegaggeeg gtteteacae egteeagag atgtatgget	60 120 180 240 300

240

480

540 546

120

360

420

120

300 360

420

180

240

480 540

546

480 540

546

180

240 300

gcgacgtggg gtcggactgg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca	360
aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc	420
agaccaccaa gcacaagtgg gaggcggccc gtgtggcgga gcagttgaga gcctacctgg	480
agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	540
gcacgg	546

<210> 56

<211> 546

<212> DNA

<213> Homo sapiens

### <400>

geteteacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageeee 60 120 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct 300 360 gcgacgtggg gtcggactgg cgcttcctcc gcgggtacca gcagtacgcc tacgacggca aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc 420 agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 57

<211> 546

<212> DNA

<213> Homo sapiens

### <400> 57

60 geteteacte catgaggtat ttetteacat cegtgteecg geeeggeege ggggageece getteatete agtgggetae gtggacgaea egcagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct gcgacgtggg gtcggactgg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 58

<211> 546

<212> DNA

<213> Homo sapiens

#### <400> 58

60 geteteacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageeec getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct gegaegtggg gteggaetgg egetteetee gegggtaeea eeagtaegee taegaeggea aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agatcaccaa gcgcaagtgg gaggcggccc atgtggcgga gcagcagaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

```
<210> 59
<211> 546
<212> DNA
<213> Homo sapiens
```

<400> 59

geteteaete eatgaggtat teeteacat eegtgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggacgaca egeagttegt geggttegae agegaegeeg egageeagag gatggageeg egggeeegt ggatagagea ggagggteeg gagtattggg accaggagae acggaaagtg aaggeeeaet eacagaetea eegagtggae etggggaeee tgegeeggeta etacaaceag agegaggeeg gtteteaeae egtecagagg atgtatgget gegaegtggg gteggaetgg egetteetee gegggtaeea ecagtaegee tacgaeggea aggattaeat egeeetgaaa gaggaeetge getettggae egeggeggae atggeagete agaeeaeeaa geacaagtgg gaggeggeee atgtggegga geagttgaga geetaeetgg agggeaegtg egtggagtgg eteegeagat acetggagaa egggaaggag aegetgeage geaegg

60

180

240 300

60

120

360

60

120

300

360

420

180

240

480 540

546

<210> 60 <211> 619 <212> DNA <213> Homo sapiens

60atggccgtca tggcgccccg aaccctcgtc ctgctactct cgggggctct ggccctgacc 120 180 egeggggage ecceptteat egeagtggge taegtggaeg acaegcagtt egtgeggtte gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggt 240 300 ccggagtatt gggacgagga gacagggaaa gtgaaggccc actcacagac tcaccgagtg 360 gacetgggga ecetgegegg etactacaac cagagegagg eeggttetea caeegteeag aggatgtatg gctgcgacgt ggggtcggac tggcgcttcc tccgcgggta ccaccagtac 420 480 gcctacgacg gcaaggatta categecetg aaagaggace tgcgctettg gacegeggeg 540 gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagttg 600 agagectace tggagggeae gtgcgtggag tggctccgca gatacetgga gaacgggaag 619 gagacgctgc agcgcacgg

<210> 61 <211> 546 <212> DNA <213> Homo sapiens

<400> 61

geteteaete eatgaggtat teeteaat eegtgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egageeggag gatggageeg egggeeegt ggatagagea ggagggteeg gagtattggg aeggggagae aeggaaagtg aaggeeeaet cacagagtea eegagtggae etgggaeee tgegeggeta etacaaecag agegaggeeg gtteteaeae eeteeagagg atgtatgget gegaegtggg gteggaetge egetteetge gegggtaeea ecagtaegee taegaeggea aggattaeat egeeetgaaa gaggaeetge getettggae egeggegae atgegegea aggattaeat egeeetgaaa gaggaeetge getettggae egegggagae atgegeagete agaeeaecaa geaeaagtgg gaggeggee atgtggegga geagtggag geetaeetgg agggeaegtg egtggagtgg eteegeagat aeetggagaa egggaaggag aegetgeagg geaegg

<210> 62 <211> 546 <212> DNA <213> Homo sapiens

<b>WO 2005/</b> 0	063985	22 / 752	PCT/JP200
geteteae getteate egagecaa acgagga tgegegge gegaegta aggattad agaccace		ettegt geggttegae agegaegeeg tagagea ggaggggeeg gagtattggg eagaetga eegagtggae etggggaece teacae egteeagagg atgtatgget etacea eeagtaegee taegaeggea ttggae egeggeggae atggeagete ttggeegga geagttgaga geetaectgg	60 120 180 240 300 360 420 480 540 546
<210> <211> <212> <213>	63 546 DNA Homo sapiens		
geteteae getteate egageca aegggga tgegegge gegaegtg aggattae agaceae	ctc catgaggtat ttetteacat cegtgte ge agtgggetae gtggaegaea egea gag gatggageeg egggegeegt gga agac aeggaaagtg aaggeeeaet cac eta etacaaceag agegaggeeg gtte ggg gteggaetgg egetteetee gegg eat egeeetgaaa gaggaeetge gete eaa geacaagtgg gaggegeee atg egtg egtggagtgg eteegeagat acet	gttegt geggttegae agegaegeeg tagagea ggagggteeg gagtattggg agaetea eegagtggae etggggaeee teacae egteeagagg atgtatgget gtaeca eeagtaegee taegaeggea ttggae egeggeggae atggeagete ttggeegga geageggaga geetaeetgg	60 120 180 240 300 360 420 480 540 546
gcttcatc cgagcca		gttegt geggttegae agegaegeeg tagagea ggaggggeeg gagtattggg	
tgcgcggc gcgacgt aggatta agaccac	agac acggaaagtg aaggcccact cac cta ctacaaccag agcgaggccg gttc ggg gccggacggg cgcttcetcc gcgg .cat cgccctgaaa gaggacctgc gctc .caa gcacaagtgg gaggcgccc atg .cgtg cgtggagtgg ctccgcagat acct	tcacac catccagagg atgtatggct gtacca ccagtacgcc tacgacggca ttggac cgcggcggac atggcagctc	240 300 360 420 480 540
<210><211><211><212><213>	65 546 DNA Homo sapiens		

<b>\213</b> /	riomo sapiens	
<400>	65	
gctctcac	tc catgaggtat ttctacacct ccgtgtcccg gcccggccgc ggggagcccc	60
getteate	gc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgccg	120
	gag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg	180
	igac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc	240
	cta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct	300

gcgacgtggg gtcggactgg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc gtgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg	360 420 480 540 546
<210> 66 <211> 546 <212> DNA <213> Homo sapiens	
<400> 66 geteteaete catgaggtat ttetteaeat eegtgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggacgaea egeagttegt geggttegae agegaegeeg egageeagag gatggagee egggegeegt ggatagagea ggagggteeg gagtattggg acggggagae acggaaagtg aaggeeeaet cacagaetea eegagtggae etggggaeee tgegeggeta etacaaceag agegaggeeg gtteteaeae egteeagagg atgtatgget gegaegtggg gteggaegg egetteetee gegggtatga acageaegee tacgaeggea aggattacat egeeetgaaa gaggaeetge getettggae egeggeggae atggeagete agaceaceaa geaeaagtgg gaggegeee atgtggegga geagttgaga geetaeetgg aggeeaegtg egtggagtgg eteegeagat acetggagaa egggaaggag acgetgeage geaegg	60 120 180 240 300 360 420 480 540 546
<210> 67 <211> 546 <212> DNA <213> Homo sapiens	
<400> 67 geteteacte catgaggtat ttetacacet cegtgteeeg geceggeege ggggageeee getteatege agtgggetae gtggacgaca egeagttegt geggttegae agegaegeeg egageeagag gatggageeg egggegeegt ggatagagea ggagggteeg gagtattggg acggggagae acggaaagtg aaggeeeact cacagactea eegagtggae etggggaeee tgegeggeta etacaaceag agegaggeeg gtteteacac egtecagagg atgtatgget gegaegtggg gteggaetgg egetteetee gegggtaeea eagattacat egeetgaaa gaggaeetge getettggae egeggegae atggeaget agaceaceaa geacaagtgg gaggeggeee atgtggegga geageagaga geetacetgg agggeaegtg egtggaegg eteegagat acetggagaa egggaaggag acgetgeage geaegg	60 120 180 240 300 360 420 480 540 546
<210> 68 <211> 546 <212> DNA <213> Homo sapiens <400> 68	
geteteacte catgaggtat ttetteacat eegtgteeeg geeegeege ggggageeee getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egageeagag gatggageeg egggegeegt ggatagagea ggaggggeeg gagtattggg aceggaacae aeggaatgtg aaggeeeact cacagaetea eegagtggae etggggaeee tgegeggeta etacaaceag agegaggeeg gtteteacae egteeagag atgtatgget gegaetggg gteggaetgg egetteetee gegggtaeea eaggattaeat egeeetgaaa gaggaeetge getettggae egeggegae atgeageea aggattaeat egeeetgaaa gaggaeetge getettggae egeggeggae atgeagete agaeeacaa geacaagtgg gaggeggeee atgtggegga geagttgaga geetaeetgg agggeaegtg egtggagtgg eteegeagat acetggagaa egggaaggag aegetgeage geaegg	60 120 180 240 300 360 420 480 540 546

gcacgg

420 480

660

720

895

897

546

240

300 360

540

600

780

840

<210> 69 <211> 895 <212> DNA <213> Homo sapiens

<400>

atggccgtca tggcgccccg aaccetcgtc etgetactet egggggetet ggccetgacc 60 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagegaeg eegegageca gaggatggag eegegggege egtggataga geaggagggt ccggagtatt gggaccagga gacacggaat gtgaaggccc agtcacagac tcaccgagtg gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccgtccag aggatgtatg gctgcgacgt ggggtcggac tggcgcttcc tccgcgggta ccaccagtac gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagttg agagcetace tggagggcae gtgcgtggag tggcteegea gatacetgga gaacgggaag gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcageggg atggggagga ccagacccag gacaeggage tegtggagae caggeetgca ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaca ggagcagaga tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atggg

<210> 70 <211> 897 DNA <212> <213> Homo sapiens 60 70atggccgtca tggcgccccg aaccetegte etgetaetet egggggetet ggccetgaec cagacetggg egggetetea etecatgagg tatttetaca eeteegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 240 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggt ccggagtatt gggacggga gacacggaaa gtgaaggccc actcacagac tcaccgagtg 300 360 gacetgggga ceetgegegg etactacaac cagagegagg ceggttetea caecetecag 420 atgatgtatg gctgcgacgt ggggtcggac tggcgcttcc tccgcgggta ccaccagtac 480 gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg 540 gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagttg 600 agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc 720 780 tggcagcggg atggggggga ccagacccag gacacggagc tcgtggagac caggcctgca 840 ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaca ggagcagaga

<210> 71 <211> 546 <212> DNA <213> Homo sapiens

<400> 71

geteteacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageece 60 120 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg 180 acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc 240 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac cctccagagg atgtatggct gcgacgtggg gtcggactgg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca 360 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg 480 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 gcacgg

tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

240

480

540

720

780

822

120

300

420 480

540

546

240

360

180 240

<210>	72
<211>	822
<212>	DNA
<213>	Homo sapiens

### <400> 72

60 geteteacte catgaggtat ttetteacat cegtgteeeg geeeggeege gaggageece 120 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct gegacgtggg gteggactgg egetteetee gegggtacea eeagtacgee tacgacggea 360 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc geacggacge ceceaaaacg catatgacte accaegetgt etetgaceat gaagceacee 600 660 tgaggtgetg ggecetgage ttetaccetg eggagateae actgacetgg eagegggatg gggaggacca gacccaggac acggagctcg tggagaccag gcctgcaggg gatggaacct tccagaagtg ggcggctgtg gtggtgcctt ctggacagga gcagagatac acctgccatg tgcagcatga gggtttgccc aagcccctca ccctgagatg gg

<210> 73 546 <211> DNA <212>

<213> Homo sapiens

### <400> 73

60 geteteacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageece getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg acggggagac acggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac cgtccagagg atgtatggct gegacgtggg gteggaetgg egetteetee gegggtaeca ceagttegee taegaeggea aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 74897 <211> <212> DNA <213> Homo sapiens

### <400>

60 atggccgtca tggcgccccg aaccetecte etgetaetet egggggecet ggccetgaee 120 cagacetggg egggetecea etecatgagg tatttettea eateegtgte eeggeeegge cgeggggage ceegetteat egeegtggge taegtggaeg acaegeagtt egtgeggtte 180 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggaggg 300 ccggagtatt gggaccagga gacacggaat gtgaaggccc agtcacagac tgaccgagtg 360 gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag ataatgtatg gctgcgacgt ggggtcggac gggcgcttcc tccgcgggta ccggcaggac 420 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcttg gaccgcggcg 540 gacatggcgg ctcagatcac caagcgcaag tgggaggcgg cccatgaggc ggagcagttg agagectace tggatggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 600 660 gagacgetge agegeaegga ecceecaag acacatatga eccaecace catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc

240

480

540

180

240

480

540

546

240

300

540

780

600

546

tggcagcggg atggggggga ccagacccag gacacggagc tcgtggagac caggcctgca 780 840 ggggatggaa cettecagaa gtgggcgget gtggtggtgc ettetggaga ggagcagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> .75 <211> 546 <212> DNA <213> Homo sapiens

### <400> 75

60 geteceacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageece 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accaggagac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagata atgtatggct gegaegtggg gteggaeggg egetteetee gegggtaeeg geaggaegee taegaeggea 360 420 aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccaa gcgcaagtgg gaggcggccc atgaggcgga gcagctgaga gcctacctgg atggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 76 <211> 546 <212> DNA <213> Homo sapiens

### <400>

60 geteceacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggacgaea egcagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggtccg gagtattggg accaggagac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagata atgtatggct 360 gegaegtggg gteggaeggg egetteetee gegggtaeeg geaggaegee taegaeggea -420 aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccaa gcgcaagtgg gaggcggccc atgaggcgga gcagttgaga gcctacctgg atggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 77 <211> 897 <212> DNA <213> Homo sapiens

### <400>

60 atggccgtca tggcgcccg aaccetecte etgetaetet egggggccet ggccetgaee 120 cagacetggg egggetecea etecatgagg tatttettea eateegtgte eeggeeegge  ${\tt cgcggggagc\ cccgcttcat\ cgccgtgggc\ tacgtggacg\ acacgcagtt\ cgtgcggttc}$ 180 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggaggg ccggagtatt gggaccagga gacacggaat gtgaaggccc agtcacagac tgaccgagtg 360 gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag ataatgtatg gctgcgacgt ggggtcggac gggcgcttcc tccgcgggta ccggcaggac 420 480 gcctacgacg gcaaggatta catcgcctg aacgaggacc tgcgctcttg gaccgcggcg gacatggegg etcagateae caagegeaag tgggaggegg eccatgtgge ggageageag agageetace tggatggeae gtgegtggag tggeteegea gatacetgga gaacgggaag gagacgetge agegeaegga ecceccaag acacatatga eccaceaece catetetgae 660 720 catgaggeea ecetgaggtg etgggeeetg ggettetace etgeggagat cacaetgace tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca

300

540

780

ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaga ggageagaga 840 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag 897

<210> 78 <211> 897 <212> DNA <213> Homo sapiens

<400>

60 atggccgtca tggcgccccg aaccetecte etgetaetet egggggccet ggccetgaee 120 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagegaeg cegegageca gaggatggag cegegggege egtggataga geaggagggg ccggagtatt gggaccagga gacacggaat gtgaaggccc agtcacagac tgaccgagtg 360 gaectgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag 420 ataatgtatg getgegacgt ggggteggac gggegettee teegegggta eeggeaggac 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgcgctettg gaccgcggcg gacatggcgg ctcagatcac caagcgcaag tgggaggcgg cccatgaggc ggagcagttg 600 agagectace tggatggeae gtgegtggag tggeteegea gatacetgga gaaceggaag 660 gagacgetge agegeaegga ecceecaag acacatatga eccaecacee catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atgggggga ccagacccag gacacggagc tcgtggagac caggcctgca 840 ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaga ggagcagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> 79 <211> 858 <212> DNA

<213> Homo sapiens

<400> 79

teteggggge cetggecetg acceagacet gggegggete ceaetecatg aggtatttet 60 teacatecgt gteeeggeee ggeegegggg ageeeegett categeegtg ggetaegtgg 120 180 acgacacgca gttcgtgcgg ttcgacagcg acgccgcgag ccagaggatg gagccgcggg cgccgtggat agagcaggag gggccggagt attgggacca ggagacacgg aatgtgaagg 240 300 cccagtcaca gactgaccga gtggacctgg ggaccctgcg cggctactac aaccagagcg 360 aggccggttc tcacaccatc cagataatgt atggctgcga cgtggggtcg gacgggcgct 420 teeteegegg gtaeeggeag gaegeetaeg aeggeaagga ttaeategee etgaaegagg 480 acctgcgctc ttggaccgcg gcggacatgg cggctcagat caccaagcgc aagtgggagg 540 eggeceatga ggeggageag ttgagageet acetggaggg eacgtgegtg gagtggetee 600 gcagatacct ggagaacggg aaggagacgc tgcagcgcac ggaccccccc aagacacata 660 tgacccacca ccccatctct gaccatgagg ccaccctgag gtgctgggcc ctgggcttct 720 accetgegga gateacaetg acctggeage gggatgggga ggaceagaee eaggacaegg 780 agctcgtgga gaccaggcct gcaggggatg gaaccttcca gaagtgggcg gctgtggtgg 840 tgeettetgg agaggageag agatacacet geeatgtgea geatgagggt etgeeeaage 858 ccctcaccct gagatggg

<210> 80 <211> 546 <212> DNA <213> Homo sapiens

60 <400> 80gctcccactc catgaggtat ttcttcacat ccgtgtcccg gcccggccgc ggggagcccc getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accaggagac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagata atgtatggct

gcgacgtggg gtcggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccaa gcgcaagtgg gaggcggccc atgaggcgga gcagttgaga gcctacctgatgccacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcaggcacgg	420 gg 480
<210> 81 <211> 546 <212> DNA <213> Homo sapiens	
<400> 81 geteceaete catgaggtat ttetteaeat eegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egageeagag gatggageeg egggeeegt ggatagagea ggaggggeeg gagtattg accaggagae acggaatgtg aaggeeeagt eacagaetga eegagtggae etggggaeet tgegeeggeta etacaaceag agegaggeeg gtteteaeae eatecagata atgtatgget gegaegtggg gteggaegge egetteetee gegggtaeeg geaggaegee tacgaeggea aggattaeat egeeetgaae gaggaeetge getettggae egegggae atggeggete agateaeaa gegeaagtgg gaggeggeee atgtggegga geagttgaga geetaeetg atggeaegtg egtggagtgg eteegeagat acctggagaa egggaaggag aegetgeaggeeggeegge	240 300 360 420 g 480
<210> 82 <211> 546 <212> DNA <213> Homo sapiens	
<400> 82 geteceaete eatgaggtat ttetteaeat eegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggacgaca egeagttegt geggttegae agegaegeeg egageeagag gatggageeg egggeeget ggatagagea ggaggggeeg gagtattg accaggagae aeggaatgtg aaggeeeact eacagaetga eegagtggae etggggaee tgegeggeta etacaaeeag agegaggeeg gtteteaeae eateeagata atgtatgget gegaegtggg gteggaegg egetteetee gegggtaeeg geaggaegee tacgaeggea aggattaeat egeeetgaae gaggaeetge getettggae egeggegae atggegete agateaeeaa gegeaagtgg gaggegeee atgagegga geagttgaga geetaeetg atggeaegtg egtggagtgg eteegeagat acctggagaa egggaaggag aegetgeaggegeeggeeggeeggae	300 300 360 420 480
<210> 83 <211> 546 <212> DNA <213> Homo sapiens	
<400> 83 geteceaete catgaggtat ttetteaeat eegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egageeagag gatggageeg egggeeget ggatagagea ggaggggeeg gagtattg accaggagae acggaatgtg aaggeeeagt eacagaetea eegagtggae etgegeggeta etacaaecag agegaggeeg gtteteaeae eatecagata atgtatgget gegaegtggg gteggaegg egetteetee gegggtaeeg geaggaegee tacgaeggea aggattaeat egeeetgaae gaggaeetge getettggae egeggegae atggeggete agateaeaa gegeaagtgg gaggeeece atgaggegga gegttgaga geggttgaga geggttgaga gegetteetee	300 360 420

agatcaccaa gcgcaagtgg gaggcggccc atgaggcgga gcagttgaga gcctacctgg atggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc

gcacgg

480

240

300

600

780

180

240

480

540

720

360

840

360

420

480 540

<210> 84 <211> 546 <212> DNA <213> Homo sapiens

<400>

60 geteceacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accaggagac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc 300 tgegeggeta etacaaccag agegaggeeg gtteteacae catecagata atgtatgget 360 gegacgtggg gteggacggg cgetteetee gegggtaceg geaggacgee tacgacggea 420 aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc 480 agatcaccaa gcgcaagtgg gaggcggccc atgtggcgga gcagcagaga gcctacctgg 540 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 85 <211> 897 <212> DNA <213> Homo sapiens

<400> 85

60 atggccgtca tggcgccccg aaccetecte etgetaetet egggggccet ggccetgaee 120 cagacetggg egggetecca etceatgagg tatttetaea eetcegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccagga gacacggaat gtgaaggccc agtcacagac tgaccgagtg gacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccatccag ataatgtatg getgegacgt ggggeeggac gggegettee teegegggta eeggeaggac gcctacgacg gcaaggatta categeeetg aacgaggace tgcgetettg gaccgcggeg gacatggcag ctcagatcac caagcgcaag tgggaggcgg cccatgcggc ggagcagcag agagectace tggagggeeg gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegeaegga ecceeccaag acacatatga eccaecacce catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atgggggga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaga ggagcagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

86 <210> 822 <211> <212> DNA <213> Homo sapiens

### <400>

60 geteceacte catgaggtat ttetacacet cegtgteeeg geceggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accaggagac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc 300 tgegeggeta etacaaccag agegaggaeg gtteteacae catecagata atgtatgget gcgacgtggg gccggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca 420 aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcagac atggcagctc agatcaccaa gcgcaagtgg gaggcggccc atgcggcgga gcagcagaga gcctacctgg agggceggtg egtggagtgg etcegcagat acetggagaa egggaaggag acgetgeage gcacggaccc ccccaagaca catatgaccc accaccccat ctctgaccat gaggccaccc 600 660 tgaggtgctg ggccctgggc ttctaccctg cggagatcac actgacctgg cagcgggatg gggaggacca gacccaggac acggagctcg tggagaccag gcctgcaggg gatggaacct

300

540

600

780

546

840

tccagaagtg ggcggctgtg gtggtgcctt ctggagagga gcagagatac acctgccatg 780 tgcagcatga gggtctgccc aagcccctca ccctgagatg gg 822

<210> 87 <211> 895

<212> DNA <213> Homo sapiens

<400> 87

atggccgtca tggcgccccg aaccetecte etgetaetet egggggeeet ggeeetgaee - 60 120 180 cgcgggaagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccagga gacacggaat gtgaaggccc agtcacagac tgaccgagtg 360 gacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccatccag 420 ataatgtatg getgegaegt ggggeeggae gggegettee teegegggta eeggeaggae 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcttg gaccgcggcg gacatggcag ctcagatcac caagcgcaag tgggaggcgg cccatgcggc ggagcagcag agagcctacc tggagggccg gtgcgtggag tggctccgca gatacctgga gaacgggaag 660 gagaegetge agegeaegga ecceeccaag acacatatga eccaecacce catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaga ggageagaga 895 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atggg

<210> 88

<211> 546

<212> DNA

<213> Homo sapiens

<400>

60 geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageece getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accaggagac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggacg gttctcacac catccagata atgtatggct 360 gcgacgtggg gccggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca 420 aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcagctc 480 agatcaccaa gcgcaagtgg gaggcggccc gtgaggcgga gcagcagaga gcctacctgg 540 agggccggtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 89

<211> 897

<212> DNA

<213> Homo sapiens

<400>

 ${\bf atggccgtca}\ {\bf tggcgccccg}\ {\bf aaccctcctc}\ {\bf ctgctactct}\ {\bf cgggggccct}\ {\bf ggccctgacc}$ 60 120 cagacetggg egggetecea etceatgagg tatttetaca eetcegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc 240 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggaccagga gacacggaat gtgaaggccc agtcacagac tgaccgagtg 360 gacetgggga ecetgegegg etactacaac cagagegagg aeggttetea caccatecag 420 ataatgtatg getgegacgt ggggeeggac gggegettee teegegggta eeggeaggac 480 gcctacgacg gcaaggatta catcgcctg aacgaggacc tgcgctcttg gaccgcggcg 540 gacatggcag ctcagatcac caagcgcaag tgggaggcgg cccatgcggc ggagcagcag 600 agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaacgggaag

gagacgetge agegeaegga ecceeccaag acacatatga eccaecacce catetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca	780
ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaga ggagcagaga	840
tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag	897

<210> 90 <211> 897 <212> DNA <213> Homo sapiens

<400> 90atggccgtca tggcgccccg aacceteete etgetaetet egggggccct ggccetgacc cagacetggg egggetecca etecatgagg tatttetaca ceteegtgte eeggeeegge 120 egeggggage eeegetteat egeegtggge taegtggaeg acaegeagtt egtgeggtte 180 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg 240 300 ccggagtatt gggaccagga gacacggaat gtgaaggccc agtcacagac tgaccgagtg 360 gacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccatccag 420 ataatgtatg getgegacgt ggggeeggac gggegettee teegegggta eeggeaggac 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcttg gaccgcggcg 540 gacatggcag ctcagatcac cgagcgcaag tgggaggcgg cccatgcggc ggagcagcag 600 agagcetace tggagggeg gtgcgtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegeacgga ecceeccaag acacatatga eccaecacee catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atgggggga ccagacccag gacacggagc tcgtggagac caggcetgca 840 ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaga ggageagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> 91 <211> 546 <212> DNA <213> Homo sapiens

<400> 91

60 geteceaete eatgaggtat ttetaeaeet eegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accaggagac acggaatgtg aaggcccagt cacagactca ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggacg gttetcacac catccagata atgtatgget 360 gcgacgtggg gccggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca 420 aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcagctc 480 agatcaccaa gcgcaagtgg gaggcggccc atgcggcgga gcagcagaga gcctacctgg 540 agggccggtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcacgg

<210> 92 <211> 897 <212> DNA <213> Homo sapiens

<400> 92

gcctacgacg gcaaggatta categeeetg aacgaggace tgegetettg gacegeggeg	480
gacatggcag ctcagatcac caagcgcaag tgggaggcgg cccatgcggc ggagcagcag	<b>54</b> 0
agagcctacc tggagggccg gtgcgtggag tggctccgca gatacctgga gaacgggaag	600
gagacgetge agegeaegga ecceeccaag acacatatga eccaecace catetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca	780
ggggatggaa cettecagaa gtgggcgget gtggtggtge ettetggaga ggagcagaga	840
tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag	897

<210> 93

<211> 546

<212> DNA

<213> Homo sapiens

#### <400> 93

60 geteceacte catgaggtat ttetacacet cegtgteceg geeeggeege ggggageece 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accaggagac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggacg gttctcacac catccagata atgtatggct 360 gegacgtggg geeggacggg egetteetee gegggtaceg geaggacgee tacgacggea 420 aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcagetc agateaceaa gegeaagtgg gaggeggee atgaggegga geageggaga geetacetgg agggccggtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 94

<211> 546

<212> DNA

<213> Homo sapiens

## <400>

60 geteceacte catgaggtat ttetacacet cegtgteeeg geceggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggccg gagtattggg accaggagac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc tgegeggeta etacaaccag agegaggaeg gtteteacae catecagata atgtatgget gcgacgtggg gccggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcagctc agatcaccaa gcgcaagtgg gaggcggccc atgcggcgga gcagcagaga gcctacctgc agggccggtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

546

180

180

240

180

480

**540** 

546

120

<210> 95

<211> 546

<212> DNA

<213> Homo sapiens

### <400> 95

60 geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc 240 300 tgcgcggcta ctacaaccag agcgaggacg gttctcacac catccagata atgtatggct gcgacgtggg gccggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca 360 420 aggattacat cgccctgaac gaggacetgc gctcttggac cgcggcggac atggcagetc agatcaccaa gegeaagtgg gaggeggeec atgeggegga geageagaga geetacetgg 480

540 agggccggtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcacgg <210> 96 546 <211> <212> DNA <213> Homo sapiens <400> 96 60 geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageece getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 acctgcagac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc 300 tgegeggeta etacaaccag agegaggaeg gtteteacae eatecagata atgtatgget 360 gcgacgtggg gccggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca aggattacat egecetgaac gaggacetge getettggae egeggeggae atggeagete 420 480 agatcaccaa gcgcaagtgg gaggcggccc atgcggcgga gcagcagaga gcctacctgg 540 agggccggtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcacgg <210> 97 <211> 546 <212> DNA Homo sapiens <213> <400> 60 ggeteceact ceatgaggta tttetacace teegtgteee ggeeeggeeg eggggageee 120 cgcttcatcg ccgtgggcta cgtggacgac acgcagttcg tgcggttcga cagcgacgcc 180 gcgagccaga ggatggagcc gcgggcgccg tggatagagc aggaggggcc ggagtattgg gaccaggaga cacggaatgt gaaggeecag teacagactg accgagtgga cetggggace 240 ctgcgcggct actacaacca gagcgaggcc ggttctcaca ccatccagat aatgtatggc 300 360 tgcgacgtgg ggccggacgg gcgcttcctc cgcgggtacc ggcaggacgc ctacgacggc 420 aaggattaca tegeeetgaa egaggaeetg egetettgga eegeggegga eatggeaget 480 cagatcacca agcgcaagtg ggaggcggcc catgcggcgg agcagcagag agcctacctg gagggccggt gcgtggagtg gctccgcaga tacctggaga acgggaagga gacgctgcag 540 546 cgcacg <210> 98 <211> 546 <212> DNA <213> Homo sapiens <400> 98 60 geteceacte catgaggtat ttetacacet cegtgteceg geeeggeege ggggageece getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accaggagac acggaatgtg aaggeecagt cacagactga eegagtggac etggggacee 240 300 tgcgcggcta ctacaaccag agcgaggacg gttctcacac catccagata atgtatggct 360 gcgacgtggg gccggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcagctc 420 agatcaccag gcgcaagtgg gaggcggccc atgcggcgga gcagcagaga gcctacctgg 480 540 agggccggtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcacgg

480

540

573

180

240

420 480

540

546

240 300

<212> DNA

<213> Homo sapiens

<400>

60 ccctggccct gacccagacc tgggcgggct cccactccat gaggtatttc tacacctccg 120 tgtcccggcc cggccgcggg aagecccgct tcatcgccgt gggctacgtg gacgacacgc agttegtgeg gttegacage gaegeegega gecagaggat ggageegegg gegeegtgga tagagcagga ggggccggag tattgggacc aggagacacg gaatgtgaag gcccagtcac agactgaccg agtggacctg gggaccetgc geggetaeta caaccagage gaggaeggtt ctcacaccat ccagataatg tatggctgcg acgtggggcc ggacgggcgc ttcctccgcg 360 420 ggtaccggca ggacgcctac gacggcaagg attacatcgc cctgaacgag gacctgcgct cttggaccgc ggcggacatg gcagctcaga tcaccaagcg caagtgggag gcggcccgtc gggcggagca gcagagagcc tacctggagg gccggtgcgt ggagtggctc cgcagatacc tggagaacgg gaaggagacg ctgcagcgca cgg

<210> 100

<211> 897

<212> DNA

<213> Homo sapiens

<400>

60 atggccgtca tggcgccccg aaccetcgtc ctgctactct cggggggccct ggccctgacc 120 cagacetggg caggetecea etceatgagg tattteteca cateegtgte eeggeeegge 180 egeggggage eeegetteat egeegtggge taegtggaeg acaegcagtt egtgeggtte 240 gacagegacg cegegageca gaggatggag cegegggege egtggataga geaggaggg 300 ccggagtatt gggacgagga gacagggaaa gtgaaggccc actcacagac tgaccgagag 360 aacetgegga tegegeteeg etaetaeaac cagagegagg eeggttetea caecetecag atgatgtttg gctgcgacgt ggggtcggac gggcgcttcc tccgcgggta ccaccagtac 420 480 gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg 540 gacatggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagttg 600 agagectace tggagggeac gtgegtggae gggeteegea gatacetgga gaaegggaag 660 gagacgetge agegeaegga ecceeccaag acacatatga eccaecacce eatetetgae 720 catgaggeca ctctgagatg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggggagga ccagacccag gacacggagc ttgtggagac caggcctgca 840 ggggatggaa ccttccagaa gtgggcagct gtggtggtac cttctggaga ggagcagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> 101

<211> 546

<212> **DNA** 

<213> Homo sapiens

#### <400> 101

60 geteceacte catgaggtat ttetecacat eegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg acgaggagac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct 300 gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca 360 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gegeaagtgg gaggeggeee gtgtggegga geagtggaga geetacetgg agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 102

<211> 546

<212> DNA

<213> Homo sapiens

<400> 102 geteceacte catgaggtat ttetecacat cegtgteceg geeeggeege ggggageece getteatege egtgggetae gtggacgaca egeagttegt geggttegae agegaegeeg egageeagag gatgageeg egggeeget ggatagagea ggaggggeeg gagtattggg acgaggagae agggaaagtg aaggeecact cacagaetga eegagggeeg egteegeteegeta etacaaceag agegaggeeg gtteteacac eetecagatg atgtttgget gegaegtggg gteggaeggg egetteetee gegggtacea eegtaegee tacgaeggea aggattaeat egeettgaae gaggaeetge getettggae egeggegae atggeggete agateacea gegeaagtgg gaggeggeee gtgtggegga geagttgaga geetaeetgg agggeaegtg egtggaegg etecgeagat acetggagaa egggaaggag aegetgeage geaegg	
<210> 103 <211> 546 <212> DNA <213> Homo sapiens	
<400> 103 geteceaete catgaggtat ttetecaeat eegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egageeagag gatggageeg egggeeget ggatagagea ggaggggeeg gagtattggg acgaggagae agggaaagtg aaggeeeaet cacagaetga eegaggagae etgegaetgg gteegaegggeeg gtteteaeae eetecagatg atgtttgget gegaegtggg gteggaeggg egetteetee gegggtaeea ecagtaegee taegaeggea aggattaeat egeetgaaa gaggaeetge getettggae egeggeggae atggeggete agateaeea gegeaagtgg gaggeggeee gtgtggegga geagttgaga geetaeetgg agggeaegtg egtggagtgg etecgagat aeetggagaa egggaaggag aegetgeage geaegg	
<210> 104 <211> 546 <212> DNA <213> Homo sapiens	
<400> 104 geteceacte catgaggtgt ttetecacat eegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggacgaca egcagttegt geggttegae agegaegeeg egageeagag gatggageeg egggeeget ggatagagea ggaggggeeg gagtattggg acgaggaga agggaaagtg aaggeeeget eacacacagaetga eegaggagae etcegeta etacaaceag agegaggeeg gtteteacac eetecagatg atgtttgget gegaegtggg gteggaeggg egetteetee gegggtaeea eeagtaegee tacgaegga aggattacat egeeetgaaa gaggaeetge getettggae egeggeggae atggeggete agateaceca gegeaagtgg gaggeggeee gtgtggegga geagttgaga geetaeetgg agggeaegtg egtggaegg etcegeagat acetggagaa egggaaggag acgetgeage geaegg	
<210> 105 <211> 897 <212> DNA <213> Homo sapiens	
<400> 105 atggccgtca tggcgccccg aaccetcgtc etgetactet egggggccet ggccetgace cagacetggg caggetccca etccatgagg tattteteca cateegtgte egggeggg cgcgggggage eccgetteat egecgtgge taegtggacg acaegcagtt egtgeggtte gacagegacg eegegageca gaggatggag eegegggege egtggataga geaggaggg ceggagtatt gggacgagga gacagggaaa gtgaaggece acteacagae tgacegagag	

aacctgcgga tcgcgctccg ctactacaac gagagcgagg ccggttctca caccctccag 360 420 atgatgtttg getgegaegt ggggteggae gggegettee teegegggta ceaccagtae 480 gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg 540 gacatggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagttg 600 agagcctacc tggagggcac gtgcgtggac gggctccgca gatacctgga gaacgggaag 660 gagacgetge agegeaegga ecceeceaag acacatatga eccaecace catetetgae catgaggcca ctctgagatg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 780 tggcagcggg atggggagga ccagacccag gacacggagc ttgtggagac caggcctgca 840 ggggatggaa cettecagaa gtgggcaget gtggtggtae ettetggaga ggagcagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> 106 <211> 897 <212> DNA <213> Homo sapiens

<400> 106

60 atggccgtca tggcgcccg aaccetcgtc etgetaetet egggggccct ggccetgacc 120 cagacetggg caggetecca etecatgagg tattteteca cateegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccagga gacacggaat atgaaggccc actcacagac tgaccgagag 360 aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccggttctca caccctccag 420 atgatgtttg getgegacgt ggggteggac gggegettee teegegggta ceaccagtae gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg gacatggegg ctcagatcac ccagegeaag tgggaggegg ccegtgtgge ggageagttg agagectace tggagggeae gtgegtggae gggeteegea gatacetgga gaaegggaag 660 gagacgetge agegeaegga ecceeccaag acacatatga eccaecace catetetgae 720 catgaggcca ctctgagatg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atgggggga ccagacccag gacacggagc ttgtggagac caggcctgca ggggatggaa cettecagaa gtgggcaget gtggtggtae ettetggaga ggagcagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

240

300

480

**540** 

600

780

240

300

840

<210> 107 <211> 897. <212> **DNA** <213> Homo sapiens

<400> 107

60 atggccgtca tggcgccccg aaccetegte etgetaetet egggggccet ggccetgaec 120 cagacetggg caggetecea etecatgagg tattteteca cateegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggacgagga gacagggaaa gtgaaggccc actcacagac tgaccgagag 360 aacctgegga tegegeteeg etactacaac cagagegagg ceggttetea caccetecag atgatgtttg getgegaegt ggggteggae gggegettee teegegggta ceaccagtae 420 480 gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg gacatggcgg ctcagatcac caagcgcaag tgggaggcgg cccatgtggc ggagcagcag 540 agagcctacc tggagggcac gtgcgtggac gggctccgca gatacctgga gaacgggaag 600 gagacgetge agegeaegga ecceeccaag acacatatga eccaecacce eatetetgae 660 720 catgaggeca etetgagatg etgggecetg ggettetace etgeggagat cacactgace tggcagcggg atggggagga ccagacccag gacacggagc ttgtggagac caggcctgca 780 ggggatggaa ccttccagaa gtgggcagct gtggtggtac cttctggaga ggagcagaga 840 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<212> DNA

<213> Homo sapiens

<400> 108

60 geteceacte catgaggtat ttetecacat cegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg acgaggagac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg 240 300 cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct 360 gegacgtggg gteggaeggg egetteetee gegggtaeca ceagtaegee taegaeggea aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc 420 480 agatcaccaa gegeaagtgg gaggeggeec atgtggegga geageagaga geetacetgg 540 agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcacgg

<210> 109

<211> 897

<212> DNA

<213> Homo sapiens

<400> 109

atggeegtea tggegeeceg aaccetegte etgetaetet egggggeect ggeeetgace 60 120 cagacetggg caggetecea etecatgagg tattteteca cateegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagegacg cegegageca gaggatggag cegegggege egtggataga geaggagggg 240 300 ccggagtatt gggacgagga gacagggaaa gtgaaggccc actcacagac tgaccgagag 360 aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccggttctca caccctccag 420 atgatgtttg getgegaegt ggggteggae gggegettee teegegggta ceaceagtae 480 gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg gacatggegg etcagateae caagegeaag tgggaggegg eccatgtgge ggageageag 540 600 agagcetace tggagggeae gtgcgtggae gggctccgca gatacetgga gaacgggaag 660 gagacgetge agegeaegga ecceeccaag acacatatga eccaecace catetetgae 720 catgaggcca ctctgagatg ctgggccctg ggcttctacc ctgcagagat cacactgacc 780 tggcagcggg atggggggga ccagacccag gacacggagc ttgtggagac caggcctgca 840 ggggatggaa cettecagaa gtgggcaget gtggtggtae ettetggaga ggagcagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> 110

<211> 546

<212> DNA

<213> Homo sapiens

60 <400> 110geteccaete catgaggtat ttetecaeat cegtgteceg geeeggeege ggggageece getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 180 240 acgaggagac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg 300 cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct 360 gegacgtggg gteggacggg cgcttcctcc gegggtacca ccagtatgcc tacgacggca 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc 480 agatcaccaa gegeaagtgg gaggeggeec atgtggegga geageagaga geetacetgg 540 agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcacgg

<210> 111

<211> 897

<212> DNA

<213> Homo sapiens

240

420

480

540

546

240 300

360

480 540

600

780 840

897

<400> 111 atggccgtca tggcgccccg aaccetcgtc etgetactet egggggccct ggccagacctggg caggetccca etccatgagg tatttetcca catcegtgte eegggggagc ceegetgggca egegtgggc taegtggacg acacgcagtt eggacagegacg ceegegagca gaggatggag eegegggege egtggataga eegggatatt gggacgagga gacagggaaa gtgaaggece actcacagac aacctgegga teegegeteeg etactacaac eagagegagg eeggttetea eeggetaeggat eegegteeggae ggggegettee teegegggta eegetaegaeg geaaggatta eategeete aaagaggae etgegetett gegacatggegg etcagatcac eaagegeaag tgggaggege eeateggeg gacatggeg etcagatcac eaagegeaag tgggaggege eeatettgge gagacgetee tgggggeae gtgegtggag tggeteegae gatacetgga gagacgetee agegeaegga eeeececaag acacatatga eeateggaggaaegetge agegeaegga eeeeeeeaga gatacetggaggatea eategeagegg atggggagga eeageeetg ggettetaee etgeggagat eatggeageggg atggggagga eeageeegg gacacggage ttgtggagaegggggatggaa eettecagaa gtgggcaget gtggtggtae ettetggaga ggggatggaa eettecagaa gtgggcaget gtggtggtae ettetggaga ggggatggaa eettecagaa gtgggcaget gtggtggtae ettetggaga ggggatggaa eatgtgeagea tgaggggtetg eeeaageee teaceetgag atacacetgee atgtgeagea tgagggtetg eeeaageee teaceetgag atacacetgee atgtgeagea tgagggtetg eeeaageee teaceetgag atacacetgee atgtgeagea tgagggtetg eeeaageeee teaceetgag atgeggatggaa eeggeageeeggeeeeeeeeee	gecegge 120 gtgeggtte 180 geaggagggg 240 gtgecgaggg 300 accetecag 360 accagtac 420 accgeggeg 480 ggagcagcag 540 gaacgggaag 600 atetetgac 660 caetgace 720 eaggectgea 780 gagcaggag 840
<210> 112 <211> 546 <212> DNA	
<213> Homo sapiens	
<400> 112 gctcccactc catgaggtat ttctccacat ccgtgtcccg gcccggccgc ggg	gagecee 60

geteceacte catgaggtat ttetecacat cegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg acgaggagac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg 300 cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct 360 gegacgtggg gteggacggg cgetteetee gegggtacea ceagtacgee tacgacggea aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc

agatcaccaa gcgcaagtgg gaggcggccc atgtggcgga gcagcagaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcactg

<210> 113 <211> 897 <212> DNA <213> Homo sapiens

## <400>

60 atggccgtca tggcgccccg aaccctcgtc ctgctactct cggggggccct ggccctgacc 120 cagacetggg caggetecca etceatgagg tatteteca cateegtgte eeggeeegge cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc 180 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggacgagga gacagggaaa gtgaaggccc actcacagac tgaccgagcg aacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccctccag atgatgtttg getgegaegt ggggteggae gggegettee teegegggta ceaccagtae 420 gectacgacg geaaggatta categeeetg aaagaggace tgegetettg gacegeggeg gacatggcgg ctcagatcac caagcgcaag tgggaggcgg cccatgtggc ggagcagcag agagectace tggagggeae gtgegtggae gggeteegea gatacetgga gaaegggaag gagacgetge agegeaegga eccececaag acacatatga eccaceaece catetetgae 660 720 catgaggcca ctctgagatg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc ttgtggagac caggcctgca ggggatggaa cettecagaa gtgggcaget gtggtggtae ettetggaga ggagcagaga tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210>	114	
<211>	546	
<212>	DNA	
<213>	Homo sapiens	
<400>	114	
	ctc catgaggtat ttctccacat ccgtgtcccg gcccggccgc ggggagcccc	60
	ege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg	120
	gag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg	180
	agac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg	240
	0 0 0	300
	ggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca	360
	cat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc	420
	cca gcgcaagtgg gaggcggccc atgtggcgga gcagcagaga gcctacctgg	480
	egtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc	540 546
gcacgg		340
<210>	115	
<211>	546	
<212>	DNA	
<213>	Homo sapiens	
<400>	115	
	ctc catgaggtat ttctccacat ccgtgtcccg gcccggccgc ggggagcccc	60
-	egc cgtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgccg	120
	gag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg	180
	agac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg	240
		300
gcgacgt	ggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca	360
	cat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc	420
	caa gcgcaagtgg gaggcggccc atgtggcgga gcagtggaga gcctacctgg	480
	cgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc	540 546
gcacgg		040
<210>	116.	
<211>	897	-
<212>	DNA Hama senions	
<213> <400>	Homo sapiens	
	tca tggcgccccg aaccetcgte etgetactet egggggccet ggccctgace	60
		120
	gage ecceptteat egeogtggge taegtggaeg acaegcagtt egtgeggtte	180
	gacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg	240
	att gggacgagga gacagggaaa gtgaaggccc agtcacagac tgaccgagag	
	gga tegegeteeg etactacaac cagagegagg eeggttetea cacceteeag	360
	ttg getgegaegt ggggteggae gggegettee teegegggta ceaceagtae	420
	acg gcaaggatta categeeetg aaagaggace tgegetettg gacegeggeg	480
	gegg ctcagatcac caagegcaag tgggaggegg cccatgtgge ggagcagcag	540 600
	cacc tggagggcac gtgcgtggac gggctccgca gatacctgga gaacgggaag	660
	etge agegeaegga ecceeccaag acacatatga eccaecaece catetetgae	720
	geca etetgagatg etgggeeetg ggettetace etgeggagat cacaetgace eggg atggggggga ecagacecag gacaeggage ttgtggagae caggeetgca	780
	ggaa cettecagaa gtgggcaget gtggtggtae ettetggaga ggagcagaga	840
	ace atatacaaca taaaaateta eeraaaceee teaceetaaa ataaaaa	897

tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<212> DNA

<213> Homo sapiens

## <400>

60 atggccgtca tggcgccccg aaccctcgtc ctgctactct cggggggccct ggccctgacc 120 cagacetggg caggetecea atceatgagg tattteteca cateegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc 240 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggacgggga gacacggaaa gtgaaggccc actcacagac tgaccgagag 360 aacetgegga tegegeteeg etaetacaac cagagegagg eeggttetea cacetecag 420 atgatgtttg getgegaegt ggggteggae gggegettee teegegggta ceaceagtae gcctacgacg gcaaggatta categeeetg aaagaggace tgegetettg gacegeggeg 480 540 gacatggcgg ctcagatcac caagcgcaag tgggaggcgg cccatgtggc ggagcagcag agageetace tggagggeae gtgegtggae gggeteegea gatacetgga gaaegggaag 600 gagacgetge agegeaegga ecceeccaag acacatatga eccaecacce catetetgae 660 720 catgaggcca ctctgagatg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggggagga ccagacccag gacacggagc ttgtggagac caggcctgca 840 ggggatggaa cettecagaa gtgggcaget gtggtggtae ettetggaga ggagcagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> 118

<211> 546

<212> DNA

<213> Homo sapiens

#### <400> 118

60 geteceaete catgaggtat ttetecaeat eegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 acgaggagac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg 300 cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct gegacgtggg gteggacggg egetteetee gegggtacea ceagtacgee taegacggea 360 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc 420 agatcaccaa gcgcaagtgg gaggcggccc atgtggcgga gcagcagaga gcctacctgg 480 540 agggccggtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

180

546

<210> 119

<211> 546

<212> DNA

<213> Homo sapiens

#### <400> 119

60 geteceacte catgaggtat ttetecacat cegtgteeeg geceggeege ggggageece 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 180 240 acgaggagac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg 300 cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct 360 gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc 420 agatcaccaa gcgcaagtgg gaggcggccc atgtggcgga gcagttgaga gcctacctgg 480 540 agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcacgg

<210> 120<211> 546

<212> DNA

<213> Homo sapiens

<400> 120 geteceaete catgaggtat ttetecaeat eegtgteeg geeeggeege ggggageece getteatege egtgggetae gtggacgaca egeagttegt geggttegae agegaegeeg egageeagag gatgageeg egggeeget ggatagagea ggaggggeeg gagtattggg acgaggagae agggaaagtg aaggeecaet cacagaetga eegaggagae etgeegateg egeteegeta etacaaecag agegaggeeg gtteteaeae egteeagag atgtatgget gegaegtgg gteggaetgg egetteetee gegggtaeea ecagtaegee tacgaeggea aggattaeat egeeetgaaa gaggaeetge getettggae egeggeggae atgeeggete agateaecaa gegeaagtgg gaggeggeee atgtggegga geageagaga geetaeetgg agggeaegtg egtggaeggg eteegeagat acetggagaa egggaaggag acgetgeage geaegg	
<210> 121 <211> 546 <212> DNA	
<213> Homo sapiens	
<400> 121	
geteceacte eatgaggtat tetecacat cegtgteceg geceggeege ggggagecee getteatege egtgggetae gtggaegaca egeagttegt geggttegae agegaegeeg egagecagag gatggageeg egggegeegt ggatagagea ggaggggeeg gagtattggg acgaggagae agggaaagtg aaggeecact cacagaetga eegaggagae etgeggateg egeteegeta etacaaceag agegaggeeg gtteteacac eetecagatg atgtatgget gegaegtggg geeggaeggg egetteetee gegggtaeca ecagtaegee tacgaeggea aggattaeat egeeetgaaa gaggaeetge getettggae egeggeggae atggeggete agateaceaa gegeaagtgg gaggegeee atgtggegga geageagaga geetaeetgg agggeaegtg egtggaeggg eteegeagat acetggagaa egggaaggag acgetgeage geaegg	
1010: 100	
<210> 122 <211> 546	
<212> DNA <213> Homo sapiens	
•	
<400> 122 geteceaete eatgaggtat ttetecaeat eegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egageeagag gatggageeg egggeegt ggatagagea ggaggggeeg gagtattggg acgaggagae agggaaagtg aaggeeeaet eacagaetga eegaggagae etgeggateg egeteegeta etaeaaceag agegaggeeg gtteteaeae eeteeagatg atgtttgget gegaegtggg gteggaeggg egetteetee gegggtaeeg geaggaegee taegaeggea aggattaeat egeeetgaaa gaggaeetge getettgae egeggeggae atggeegget	240 300 360 420
agatcaccaa gcgcaagtgg gaggcggccc atgtggcgga gcagcagaga gcctacctgg agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg	480 540 546
	0.10
<210> 123 <211> 546 <212> DNA <213> Homo sapiens	
<400> 123	
geteceacte catgaggtat ttetecacat cegtgteceg geceggeege ggggageece getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egageeagag gatggageeg egggegeegt ggatagagea ggaggggeeg gagtattggg	

acgaggagac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct

gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca aggattacat cgccctgaaa gaggacetgc gctcttggac cgcggcggac atggcggctc agatcaccaa gcgcaagtgg gaggcggccc atgaggcgga gcagttgaga gcctacctgg atggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg	360 420 480 540 546
<210> 124 <211> 546	
<211> 546 <212> DNA	
<213> Homo sapiens	
<400> 124 geteceaete catgaggtat ttetecaeat eegtgteeeg geeeggeege ggggageeee	60
getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egageeagag gatggageeg egggegeegt ggatagagea ggaggggeeg gagtattggg aegaggagae agggaaagtg aaggeeeagt eacagaetga eegagtggae etggggaeee tgegeggeta etacaaecag agegaggaeg gtteteaeae eetceagatg atgtttgget	240 300
gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc	$\frac{360}{420}$
agatcaccaa gcgcaagtgg gaggcggccc atgtggcgga gcagcagaga gcctacctgg	480
agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc	540
gcacgg	546
c010> 105	
<210> 125 <211> 546	
<211> 546 <212> DNA	
<213> Homo sapiens	
<400> 125	
gctcccaatc catgaggtat ttctccacat ccgtgtcccg gcccggccgc ggggagcccc	60
getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egageeagag gatggageeg egggegeegt ggatagagea ggaggggeeg gagtattgggaeggaggaea agggaaagtg aaggeeeact cacagaetga eegagagaae etgeggateg	240
cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca	300 360
aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc	420
agatcaccaa gegeaagtgg gaggeggeee atgtggegga geageagaga geetacetgg	480 540
agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg	546
<210> 126	
<211> 546	
<212> DNA <213> Homo sapiens	
<213> Homo sapiens	
<400> 126	60
gctcccactc catgaggtat ttctccacat ccgtgtcccg gcccggccgc ggggagcccc gcttcatcgc cgtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgccg	60 120
cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg	
acgaggagac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg	•
cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct	300
gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca	360
aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc	420 - 480
agatcaccaa gegeaagtgg gaggeggeee atgtggegga geageagaga geetacetgg agggeaegtg egtggaeggg eteegeagat acetggagaa egggaaggag aegetgeage	540
acacaa	546

gcacgg

<210> 127 <211> 897 <212> DNA <213> Homo sapiens <400> 60 atggccgtca tggcgccccg aaccctcgtc ctgctactct cgggggccct ggccctgacc 120 cagacetggg caggetecea etceatgagg tattteteca cateegtgte eeggeeegge cgeggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc 180 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggacgagga gacagggaaa gtgaaggccc actcacagac tgaccgagag 360 aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccggttctca caccctccag 420 atgatgtttg getgegaegt ggggteggae gggegettee teegegggta ceaccagtae 480 geetacgacg geaaggatta categeeetg aaagaggace tgegetettg gaeegeggeg 540 gacatggegg ctcagatcac caagegeaag tgggaggegg cccatgtgge ggageagtgg agagtetace tggagggeae gtgcgtggag tggeteegea gatacetgga gaaegggaag 600 gagacgetge agegeaegga ecceeccaag acacatatga eccaecace catetetgae 660 720 catgaggcca ctctgagatg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggggagga ccagacccag gacacggagc ttgtggagac caggcctgca ggggatggaa cettecagaa gtgggcaget gtggtggtac ettetggaga ggagcagaga 840 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag <210> 128 <211> 546 <212> DNA <213> Homo sapiens <400> 128 geteceacte catgaggtat ttetecacat cegtgteceg geeggeege ggggageece 60 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 180 240 acgaggagac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg cgeteegeta etacaaccag agegaggeeg gtteteacae cetecagatg atgtttgget 300 gegacgtggg gteggaeggg egetteetee gegggtaeca ceagtaegee taegaeggea 360 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc 420 480 agatcaccaa gcgcaagtgg gaggcggccc atgtggcgga gcagcagaga gcctacctgg agggcacgtg cgtggactgg ctccgcagat acctggagaa cgggaaggag acgctgcagc **540** 546 gcacgg <210> 129 <211> 546 <212> DNA <213> Homo sapiens

<400>

geteceacte catgaggtat ttetecacat cegtgteceg geceggeege ggggageece 60 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggccg gagtattggg 240 accggaacac acggaatgtg aaggcccagt cacagactga ccgagagaac ctgcggatcg 300 egeteegeta etacaaceag agegaggeeg gtteteacae cetecagatg atgtttgget gegaegtggg gteggaeggg egetteetee gegggtaeca eeagtaegee tacgaeggea 360 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc 480 agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagttgaga gcctacctgg 540 agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

180

546

<210> 130 <211> 546 <212> DNA

240

480 540

180

240

300

540

599

**546** ·

### <213> Homo sapiens

<400> 130 geteceacte catgaggtgt ttetecacat cegtgteeeg geeeggeege ggggageece 60 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg acgaggagac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg 300 cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca 360 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccaa gegeaagtgg gaggeggeee atgtggegga geageagaga geetaeetgg agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 131 <211> 599 <212> DNA Homo sapiens <213> <400> 131

60 aaccetecte etgetaetet egggggeeet ggeeetgaee eagacetggg eaggeteeea 120  ${\tt cgccgtgggc\ tacgtggacg\ acacgcagtt\ cgtgcggttc\ gacagcgacg\ ccgcgagcca}$ gaggatggag ccgcgggcgc cgtggataga gcaggaggg ccggagtatt gggacgagga gacagggaaa gtgaaggccc actcacagac tgaccgagag aacctgcgga tcgcgctccg 360 ctactacaac cagagegagg ceggttetea caecetecag atgatgtttg getgegaegt 420 ggggteggae gggegettee tecaegggta ceaecagtae geetaegaeg geaaggatta 480 categocetg aaagaggace tgegetettg gaeegeggeg gaeatggegg eteagateae caagcgcaag tgggaggcgg cccatgtggc ggagcagcag agagcctacc tggagggcac gtgcgtggac gggctccgca gatacctgga gaacgggaag gagacgctgc agcgcacgg

<210> 132 <211> 619 <212> DNA <213> Homo sapiens

<400> 132

60 atggeegtea tggegeeceg aaccetegte etgetaetet egggggeect ggeeetgace cagacetggg caggetecea etceatgagg tattteteca cateegtgte eeggeeegge 120 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc 240 gacagegacg cegegageca gaggatggag cegegggege egtggataga geaggaggg 300 ceggagtatt gggacgagga gacagggaaa gtgaaggeec acteacagae tgacegagag 360 aacctgegga tegegeteeg etactacaac eagagegagg eeggttetea eacceteeag 420 atgatgtttg getgegacgt ggggteggac gggegettee teegegggta ceaecagtae 480 geetacgacg geaaggatta categeeetg aaagaggace tgegetettg gaeegeggeg gacagggcgg ctcagatcac caagcgcaag tgggaggcgg cccatgtggc ggagcagcag 540 600 agagectace tggagggeae gtgcgtggae gggeteegea gatacetgga gaaegggaag 619gagacgctgc agcgcacgg

<210> 133 <211> 546

<212> **DNA** 

<213> Homo sapiens

<400> 133

60 geteceacte catgaggtat ttetecacat cegtgteeeg geeeggeege ggggageece 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg

acgaggagac agggaaagtg aaggcccact cacagactca ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccaa gcgcaagtgg gaggcggccc atgtggcgga gcagcagga gcctacctgg agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg	240 300 360 420 480 540 546
<210> 134	
<211> 546	
<212> DNA	

<213> Homo sapiens

<400> 60 geteceacte catgaggtat ttetecacat cegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240acgaggagac acggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg 300 cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct 360 gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca 420 aggattacat egecetgaaa gaggacetge getettggae egeggeggae atggeggete 480 agatcaccaa gcgcaagtgg gaggcggccc atgtggcgga gcagcagaga gcctacctgg agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 546 gcacgg

<210> 135 <211> 546 <212> DNA <213> Homo sapiens

<400> 135

geteceacte catgaggtat ttetecacat cegtgteeeg geeeggeege ggggageece 60 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 acgaggagac agggaaagtg aaggcccact cacagactca ccgagagaac ctgcggatcg 300 cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca 360 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc 480 agatcaccaa gcgcaagtgg gaggcggccc atgtggcgga gcagcagaga gcctacctgg 540 agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcacgg

<210> 136 <211> 546 <212> DNA <213> Homo sapiens

<400> 136

geteceacte catgaggtat ttetecacat eegtgteeeg geeeggeege ggggageeee 60 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 acgagcagac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg 300 cgetcegeta etacaaceag agegaggeeg gttetcacae cetceagatg atgtttgget 360 gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc 480 agatcaccaa gegeaagtgg gaggeggeec atgtggegga geageagaga geetacetgg 540 agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc

240

**48**0

540

546

546 gcacgg 137 <210> <211> 546 <212> DNA <213> Homo sapiens <400> geteceaete catgaggtat ttetecaeat eegtgteeeg geeeggeege ggggageeee 60 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 acgaggagac agggaaagtg aaggcccact cacagactga ccgagagagc ctgcggatcg 300 cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct 360 gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc 480 agatcaccaa gcgcaagtgg gaggcggccc atgtggcgga gcagcagaga gcctacctgg 540 agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcacgg <210> 138 822 <211> <212> DNA <213> Homo sapiens <400> 138 60 geteceaete eatgaggtat ttetecaeat eegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 180 240 acgaggagac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg 300 cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct 360 gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc 480 agatcaccaa gegeaagtgg gaggeggeec atgtggegga geageagaga geetacetgg 540 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 600 geacggacge ecceaaaacg catatgacte accaegetgt etetgaceat gaageeacce 660 tgaggtgetg ggecetgage ttetaccetg eggagateae actgacetgg eagegggatg 720 gggaggacca gacccaggac acggagctcg tggagaccag gcctgcaggg gatggaacct 780 tccagaagtg ggcggctgtg gtggtgcctt ctggacagga gcagagatac acctgccatg 822 tgcagcatga gggtttgccc aagcccctca ccctgagatg gg <210> 139 <211> 546 <212> DNA <213> Homo sapiens

<400> 139

geteceaete catgaggtat ttetecaeat eegtgteeeg geeeggeege ggggageeee 60 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggccg gagtattggg acgaggagac agggaaagtg aaggcccact cacagattga ccgagagaac ctgcggatcg 300 cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct 360 gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc 420 agatcaccaa gcgcaagtgg gaggcggccc atgtggcgga gcagcagaga gcctacctgg agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

```
<210>
        140
<211>
        546
<212>
        DNA
<213>
        Homo sapiens
       140gctcccactc catgaggtat ttctccacat ccgtgtcccg gcccggccgc ggggagcccc
                                                                               60
getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg
cgagccagag gatggagccg tgggcgccgt ggatagagca ggaggggccg gagtattggg
                                                                       180
acgaggagac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg
                                                                       240
                                                                   300
cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct
gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca
                                                                    360
aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc
                                                                    420
agatcaccaa gegcaagtgg gaggeggeec atgtggegga geageagaga gectacetgg
                                                                      480
agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc
                                                                      540
                                                                        546
gcacgg
<210>
        141
<211>
        546
<212>
        DNA
<213>
        Homo sapiens
<400>
                                                                   60
geteceacte catgaggtat ttetecaeat cegtgteceg geeeggeege ggggageece
                                                                    120
getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg
cgagccagag gatggagctg cgggcgccgt ggatagagca ggaggggccg gagtattggg
                                                                       180
acgaggagac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg
                                                                       240
cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct
                                                                    360
gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca
aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc
                                                                    420
agatcaccaa gegeaagtgg gaggeggeee atgtggegga geageagaga geetacetgg
                                                                      480
agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc
                                                                      540
gcacgg
                                                                        546
<210>
        142
        546.
<211>
<212>
        DNA
<213>
        Homo sapiens
<400>
geteceacte catgagetat ttetecacat cegtgteceg geceggeege ggggageece
                                                                   60
                                                                   120
getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg
cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg
                                                                       180
acgaggagac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg
                                                                      240
                                                                  300
cgctccgcta ctacaaccag agcgaggccg gttctcacac cctccagatg atgtttggct
gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca
                                                                    360
aggattacat egecetgaaa gaggacetge getettggae egeggeggae atggeggete
                                                                    420
                                                                      480
agatcaccaa gcgcaagtgg gaggcggccc atgtggcgga gcagcagaga gcctacctgg
agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc
                                                                      540
gcacgg
                                                                        546
```

<sup>&</sup>lt;211> 898

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

cagacetggg egggetècea etceatgagg tatttetaea eetcegtgte eeggeeegge	120
cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc	180
gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg	240
ccggagtatt gggaccggaa cacacggaat gtgaaggccc actcacagac tgaccgagag	300
agcetgegga tegegeteeg etactacaac cagagegagg aeggttetea caccatecag	360
aggatgtatg gctgcgacgt ggggccggac gggcgcttcc tccgcgggta ccagcaggac	420
gcttacgacg gcaaggatta categeeetg aacgaggace tgegetettg gacegeggeg	480
gacatggcgg ctcagatcac ccagcgcaag tgggagacgg cccatgaggc ggagcagtgg	<b>540</b>
agagectace tggagggeeg gtgegtggag tggeteegea gatacetgga bgaaegggaa	600
ggagacgetg cagegcacgg acgeeccaa gaegcatatg acteaceaeg etgtetetga	660
ccatgaggcc accetgaggt getgggeeet gagettetae eetgeggaga teacaetgae	720
ctggcagcgg gatggggagg accagaccca ggacacggag ctcgtggaga ccaggcctgc	<b>78</b> 0
aggggatggg accttccaga agtgggcgtc tgtggtggtg ccttctggac aggagcagag	840
atacacctgc catgtgcagc atgagggtct gcccaagccc ctcaccctga gatgggag	898

<210> 144 <211> 897 <212> DNA <213> Homo sapiens <400> 144

60 atggeegtea tggegeeceg aaccetegte etgetaetet egggggeeet ggeeetgaee 120 cagacetggg egggetecca etceatgagg tatttetaca ecteegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggaccggaa cacacggaat gtgaaggccc agtcacagac tgaccgagag 360 agectgegga tegegeteeg etactacaac cagagegagg aeggttetea caccatecag 420 aggatgtatg getgegacgt ggggeeggac gggegettee teegegggta eeageaggae 480 gettacgacg geaaggatta categeeetg aacgaggace tgegetettg gaeegeggeg 540 gacatggcgg ctcagatcac ccagcgcaag tgggagacgg cccatgaggc ggagcagtgg agagcctacc tggagggccg gtgcgtggag tggctccgca gatacctgga gaacgggaag 600 660 gagacgetge agegeaegga egececeaag aegeatatga eteaceaege tgtetetgae catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc 720 780 tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggga cettecagaa gtgggegtet gtggtggtge ettetggaca ggagcagaga 840 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag 897

240

180

480

540 546

<210> 145 <211> 546 DNA <212> <213> Homo sapiens

<400> 145

60 geteceacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageece 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accggaacac acggaatgtg aaggcccact cacagactga ccgagagagc ctgcggatcg 300 cgctccgcta ctacaaccag agcgaggacg gttctcacac catccagagg atgtatggct gcgacgtggg gccggacggg cgcttcctcc gcgggtàcca gcaggacgct tacgacggca 360 aggattacat egecetgaac gaggacetge getettggae egeggeggae atggeggete 420 agatcaccca gegeaagtgg gagaeggeec atgaggegga geagtggaga geetacetgg agggeeggtg egtggagtgg etcegeagat acetggagaa egggaaggag acgetgeage gcacgg

<210> 146 <211> 546 <212> DNA <213> Homo sapiens

240

300

540 600

780

240 300

360

420

540

600

780

840

840

897

360

420

480

660 720

geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageece 60 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 egageeagag gatggageeg egggeeget ggatagagea ggaggggeeg gagtattggg 180 aceggaacae acggaatgtg aaggeecaet cacagaetga eegagagge egteteegea etcacae eatecagagg atgtatgget 240 gegaegtggg geeggaeggg egetteetee geggtaeea geaggaeget tatgaggea 360 480
getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 egageeagag gatggageeg egggegeegt ggatagagea ggaggggeeg gagtattggg 180 aceggaaeae aeggaatgtg aaggeeeaet cacagaetga eegaggagee etgeggateg 240 egeteegeta etacaaeeag agegaggaeg gtteteaeae eateeagagg atgtatgget 300 gegaegtggg geeggaeggg egetteetee gegggtaeea geaggaeget taegaeggea 360
cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggcccact cacagactga ccgagagagc ctgcggatcg cgctccgcta ctacaaccag agcgaggacg gttctcacac catccagagg atgtatgget gcgacgtggg gccggacggg cgcttcctcc gcgggtacca gcaggacgct tacgacggca 360
accggaacac acggaatgtg aaggcccact cacagactga ccgagagagc ctgcggatcg cgctccgcta ctacaaccag agcgaggacg gttctcacac catccagagg atgtatggct 300 gcgacgtggg gccggacggg cgcttcctcc gcgggtacca gcaggacgct tacgacggca 360
cgctccgcta ctacaaccag agcgaggacg gttctcacac catccagagg atgtatggct 300 gcgacgtggg gccggacggg cgcttcctcc gcgggtacca gcaggacgct tacgacggca 360
gcgacgtggg gccggacggg cgcttcctcc gcgggtacca gcaggacgct tacgacggca 360
aggattacat egecetgaac gaggacetge getettggac egeggeggac atggeggete 420
agatcaccca gcgcaagtgg gagacggccc atgaggcgga gcagcagaga gcctacctgg 480
agggccggtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540
gcacgg 540

<210> 147 <211> 897 <212> DNA

<213> Homo sapiens

### <400>

60 atggccgtca tggcgccccg aaccctcgtc ctgctactct cggggggccct ggccctgacc 120 cagacetggg cgggetecea etecatgagg tatttetaca eetecgtgte eeggeeegge cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacggaat gtgaaggccc actcacagac tgaccgagcg aacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccatccag aggatgtatg getgegaegt ggggeeggae gggegettee teegegggta eeageaggae gettaegacg geaaggatta categeeetg aacgaggace tgegetettg gacegeggeg gacatggcgg etcagatcae ceagegeaag tgggagaegg eccatgagge ggageagtgg agagectace tggagggeeg gtgegtggag tggeteegea gatacetgga gaacgggaag gagacgetge agegeaegga egececeaag aegeatatga eteaceaege tgtetetgae catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggga ccttccagaa gtgggcgtct gtggtggtgc cttctggaca ggagcagaga tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> 148 <211> 897 <212> **DNA** <213> Homo sapiens

## <400> 148

60 atggccgtca tggcgccccg aaccetcgtc ctgctactct cggggggccct ggccctgacc 120 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagegacg cegegageca gaggatggag cegegggege egtggataga geaggagggg ccggagtatt gggaccggaa cacacggaat gtgaaggccc actcacagac tgaccgagcg aacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccatccag aggatgtatg getgegacgt ggggeeggac gggegettee teegegggta eeageagaac gettacgacg geaaggatta categeeetg aacgaggace tgegetettg gacegeggeg 480 gacatggcgg ctcagatcac ccagcgcaag tgggagacgg cccatgaggc ggagcagtgg agageetace tggagggeeg gtgcgtggag tggeteegea gatacetgga gaacgggaag gagacgetge agegeaegga egececeaag aegeatatga eteaceaege tgtetetgae 660 720 catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggga cettecagaa gtgggegtet gtggtggtge ettetggaca ggagcagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

300

360

420

480

540

600 660

780

240

300

540

780

240

840

897

600 660

360 420

480

840

897

<210> 149 <211> 897 <212> **DNA** <213> Homo sapiens

<400>

60 atggccgtca tggcgcccg aaccetcgtc etgetactet egggggccct ggccetgacc 120 cagacetggg egggetecea etceatgagg tatttetaea eetcegtgte eeggeeegge 180 cgeggggage cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagegacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacggaat gtgaaggccc actcacagac tcaccgagtg gacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccatccag aggatgtatg gctgcgacgt ggggccggac gggcgcttcc tccgcgggta ccagcaggac gettaegaeg geaaggatta eategeeetg aacgaggaee tgegetettg gaeegeggeg gacatggegg ctcagatcac ccagegcaag tgggagacgg cccatgagge ggagcagtgg agagectace tggagggeeg gtgegtggag tggeteegea gatacetgga gaaegggaag gagacgetge agegeaegga egececeaag aegeatatga eteaceaege tgtetetgae 720 catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggga cettecagaa gtgggegtet gtggtggtge ettetggaca ggagcagaga tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> 150 897 <211> <212> DNA <213> Homo sapiens

<400> 150

60 atggccgtca tggcgccccg aaccetcgtc ctgctactct cgggggccct ggccctgacc 120 cagacetggg egggetecea etceatgagg tatttetaca eetcegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacggaat gtgaaggccc actcacagac tgaccgagcg aacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccatccag aggatgtatg getgegaegt ggggeeggae gggegettee teegegggta eeageaggae gettaegaeg geaaggatta categeeetg aacgaggaee tgegetettg gaeegeggeg gacatggcgg ctcagatcac ccagcgcaag tgggagacgg cccatgaggc ggagcagtgg agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag gagacgetge agegeaegga egececeaag aegeatatga eteaceaege tgtetetgae 720 catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggggga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggga cettecagaa gtgggegtet gtggtggtge ettetggaca ggageagaga tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> 151 <211> 897 <212> DNA <213> Homo sapiens

<400>

60 atggccgtca tggcgccccg aaccctcgtc ctgctactct cgggggccct ggccctgacc 120 cagacetggg egggetecea etceatgagg tatttetaca eetcegtgte eeggeeegge cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc 180 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggaccggaa cacacggaat gtgaaggccc actcacagac tgaccgagag 360 aacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccatccag 420 aggatgtatg getgegaegt ggggeeggae gggegettee teegegggta eeageaggae 480 gettacgacg geaaggatta categeeetg aacgaggace tgegetettg gacegeggeg

240

360

480

540

546

240

300

540

600

780

gacatggcgg ctcagatcac ccagcgcaag tgggagacgg cccatgaggc ggagcagtgg agagcctacc tggagggccg gtgcgtggag tggctccgca gatacctgga gaacgggaag gagacgctgc agcgcacgga cgcccccaag acgcatatga ctcaccacgc tgtctctgac	540 600 660
catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc	<b>72</b> 0
tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca	780
ggggatggga cettecagaa gtgggcgtet gtggtggtge ettetggaca ggagcagaga	840
tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag	897

<210> 152

<211> 546

<212> DNA

<213> Homo sapiens

<400> 152

geteceaete catgaggtat ttetacaeet eegtgteeeg geeeggeege ggggageeee **6**0 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggcccact cacagactca ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggacg gttctcacac catccagagg atgtatggct gcgacgtggg gccggacggg cgcttcctcc gcgggtacca gcgggacgct tacgacggca 420 aggattacat cgccetgaac gaggacetge getettggac egeggeggac atggeggete agatcaccca gcgcaagtgg gagacggccc atgaggcgga gcagtggaga gcctacctgg agggccggtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 153

897 <211>

<212> DNA

<213> Homo sapiens

# <400> 153

60 atggccgtca tggcgcccg aaccetcgtc ctgctactct cgggggccct ggccctgacc 120 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggacgggga gacacggaaa gtgaaggccc actcacagac tgaccgagcg 360 aacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccatccag 420 aggatgtatg getgegaegt ggggeeggae gggegettee teegegggta eeageaggae 480 gettacgacg geaaggatta categeeetg aacgaggace tgegetettg gacegeggeg gacatggegg ctcagatcac ccagegcaag tgggagacgg cccatgagge ggagcagtgg agagectace tggagggeeg gtgcgtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegeacgga egececeaag acgeatatga etcaceaege tgtetetgae catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca 840 ggggatggga cettecagaa gtgggegtet gtggtggtge ettetggaca ggagcagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> 154

<211> 897

<212> DNA

<213> Homo sapiens

## <400> 154

60 atggccgtca tggcgccccg aaccctcgtc ctgctactct cgggggccct ggccctgacc 120 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg 240

120

180

240

480

540 546

180

240

480

540

120

300

180 240

546

300

360

420

ccggagtatt gggaccggaa cacacggaat gtgaaggccc actcacagac tgaccgagcg	300
aacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccatccag	360
aggatgtatg getgegaegt ggggeeggae gggegettee teegegggta ceageaggae	420
gettacgacg geaaggatta categeeetg aacgaggace tgegetettg gacegeggeg	480
gacatggcgg ctcagatcac ccagcgcaag tgggagacgg cccatgaggc ggagcagcag	<b>540</b>
agagectace tggagggeeg gtgegtggag tggeteegea gatacetgga gaaegggaag	600
gagacgetge agegeaegga egececeaag aegeatatga eteaceaege tgtetetgae	660
catgaggcca ccctgaggtg ctgggccctg agettctacc ctgcggagat cacactgacc	720
tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca	780
ggggatggga cettecagaa gtgggegtet gtggtggtge ettetggaca ggagcagaga	840
tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag	897

<210> 155

<211> 546

<212> DNA

<213> Homo sapiens

### <400> 155

geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggeecact cacagactga cegagegaac etggggacec tgcgcggcta ctacaaccag agcgaggacg gttctcacac catccagagg atgtatggct gcgacgtggg gccggacggg cgcttcctcc gcgggtacca gcaggacgct tacgacggca aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gcgcaagtgg gagacggcc atgaggcgga gcagtggaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 156

<211> 546 <212> DNA

<213> Homo sapiens

<400> 156

60 geteceacte catgaggtat ttetacacet cegtgteeeg geceggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggcccact cacagactga ccgagcgaac ctggggaccc 300 tgegeggeta etacaaceag agegaggaeg gtteteacae cateeagagg atgtatgget 360 gegacgtggg geeggacggg egetteetee gegggtacea geaggacget tacgacggca 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gcgcaagtgg gagacggccc atgaggcgga gcagtggaga gcctacctgg agggccggtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 157 546

<211>

<212> DNA

<213> Homo sapiens

# <400> 157

60 geteceacte catgaggtat ttetacacet cegtgteeeg geceggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggcccact cacagactga ccgagcgaac ctggggaccc tgcgcggcta ctacaaccag agcgaggacg gttctcacac catccagagg atgtatggct

gcgacgtggg gccggacggg cgcttcctcc gcgggtacca gcaggacgct tacgacggca aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gcgcaagtgg gagacggccc atgtggcgga gcagtggaga gcctacctgg agggccggtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg	360 420 480 540 546
<210> 158	

<211> 546 <212> DNA

<213> Homo sapiens

<400>

geteceaete eatgaggtat ttetacaeet eegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggcccagt cacagactga ccgagcgaac ctggggaccc tgcgcggcta ctacaaccag agcgaggacg gttctcacac catccagagg atgtatggct gcgacgtggg gccggacggg cgcttcctcc gcgggtacca gcaggacgct tacgacggca aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gegeaagtgg gagaeggeec atgaggegga geagtggaga geetacctgg agggccggtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

180

240 300

360

60

120

<210> 159 <211> 546 <212> **DNA** 

<213> Homo sapiens

<400> 159

60 geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egcagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggcccact cacagactga ccgagcgaac ctggggaccc tgegeggeta etacaaccag agegaggaeg gtteteacae catecagagg atgtatgget gegacgtggg geeggacggg egetteetee gegggtacea geaggacget tacgacggea aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agateaceca gegeaagtgg gaggeggeec atgaggegga geagtggaga geetacetgg agggccggtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

546

240

300

360

420

540

600

480

660

180

<210> 160 <211> 897 <212> DNA Homo sapiens <213>

<400>

60 atggccgtca tggcgccccg aaccctcgtc ctgctactct cggggggccct ggccctgacc 120 cagacetggg egggetecca etceatgagg tatttetaca eetcegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttg gacagegaeg cegegageca gaggatggag cegegggege egtggataga geaggagggg ccggagtatt gggaccggaa cacacggaat gtgaaggccc actcacagac tgaccgagcg aacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccatccag aggatgtatg getgegacgt ggggeeggac gggegettee teegegggta ceageaggae gettaegaeg geaaggatta eategeeetg aacgaggaee tgegetettg gaeegeggeg gacatggcgg ctcagatcac ccagcgcaag tgggagacgg cccatgaggc ggagcagtgg agagcetace tggagggeeg gtgcgtggag tggctccgca gatacetgga gaacgggaag gagacgetge agegeaegga egececeaag aegeatatga eteaceaege tgtetetgae 720 catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc

tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggga ccttccagaa gtgggcgtct gtggtggtgc cttctggaca ggagcagaga tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag	780 840 897
<210> 161 <211> 546 <212> DNA <213> Homo sapiens	
<400> 161 geteceaete catgaggtat ttetecaeat eegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggacgaea egeagttegt geggttegae agegaegeeg egageeaga gatgageeg egggeeget ggatagagea ggaggggeeg gagtattggg aceggaaeae aceggaatgt aaggeeeaet cacagaetga eegagegaae etggggaeee tgegeggeta etacaaeeag agegaggaeg gtteteaeae eatecagagg atgtatgget gegaegtggg geeggaeggg egetteetee gegggtaeea geaggaeget tacgaeggea aggattaeat egeeetgaae gaggaeetge getettggae egeggeggae atggeggete agateaeea gegeaagtgg gagaeggee atgaggegga geagtggaga geetaeetgg agggeeggt egtggagtgg eteegeagat acetggagaa egggaaggag geagtgeage geagggeeggt egtggagtgg eteegeagat acetggagaa egggaaggag acgetgeage geaegg	60 120 180 240 300 360 420 480 540 546
<210> 162 <211> 546 <212> DNA <213> Homo sapiens	
<400> 162 geteceaete eatgaggtat ttetaeaeet eegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egcagttegt geggttegae agegaegeeg egageeagag gatggageeg egggeeget ggatagagea ggaggggeeg gagtattggg aceggaaeae aceggaatgt aaggeeeaet eacagaetga eegagegaae etggggaeee tgegeggeta etaeaaeeag agegaggaeg gtaeteaeae eateeagagg atgtatgget gegaegtggg geeggaeggg egetteetee gegggtaeea geaggaeget taegaeggea aggataeat egeeetgaae gaggaeetge getettggae egeggeggae atggeggete agateaeea gegeaagtgg gagaeggee atgaggegga geagtggaag geetaeetgg agggeeggt egtggagtgg eteegeagat acetggagaa egggaaggag geagtgeagg	60 120 180 240 300 360 420 480 540 546
<210> 163 <211> 546 <212> DNA <213> Homo sapiens	
<400> 163 geteceaete eatgaggtat ttetaeaeet eegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egageeaga gatggageeg egggeegt ggataggga gggggeeg gagtattggg aceggaaeae aceggaatgtg aaggeeeaet eacagaetga eegagegaae etggggaeee tgegeggeta etaeaaeeag agegaggaeg gtteteaeae eatceagagg atgtatgget	60 120 180 240 300

tgcgcggcta ctacaaccag agcgaggacg gttctcacac catccagagg atgtatggct

gcgacgtggg gccggacggg cgcttcctcc gcgggtacca gcaggacgct tacgacggca

aggattacat egeettgaac gaggacetge getettggae egeggeggae atggeggete agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagtggaga gcctacctgg

 ${\tt agggccggtg} \ {\tt cgtggagtgg} \ {\tt ctccgcagat} \ {\tt acctggagaa} \ {\tt cgggaaggag} \ {\tt acgctgcagc}$ 

360

480 540

546

420

<210> 164

gcacgg

300 360

420

480

540 600

780

240

300

540

600

780

240

300

540

840

840

<211> 897 DNA <212>

<213> Homo sapiens

<400> 164

60 atggccgtca tggcgccccg aaccctcctc ctgctactct tgggggccct ggccctgacc 120 cagacetggg egggetecca etceatgagg tattteacea eateegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttt gacagcgacg ccgcgagcca gaggatggag ccgcgggcac cgtggataga gcaggagggg ccggagtatt gggacctgca gacacggaat gtgaaggccc agtcacagac tgaccgagcg aacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag atgatgtatg getgecaegt ggggteggae gggegettee teegegggta eeggeaggae gcctacgacg gcaaggatta categoettg aacgaggace tgcgctettg gaccgcggcg gacatggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagttg agagcetace tggagggeae gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegeaegga egececeaag aegeatatga eteaceaege tgtetetgae 720 catgaggcca ccctgaggtg ctgggccctg agettctacc ctgcggagat cacactgacc tggcagcggg atggggggga ccagacccag gacacggagc ttgtggagac caggcctgca ggggatggaa cettecagaa gtgggcgtet gtggtggtge ettetggaca ggagcagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> 165

<211> 897 <212> DNA

<213> Homo sapiens

<400>

60 atggccgtca tggcgccccg aaccetecte etgetaetet tgggggccet ggccetgaec 120 cagacetggg egggetecea etceatgagg tattteacea cateegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttt gacagcgacg ccgcgagcca gaggatggag ccgcgggcac cgtggataga gcaggaggg ccggagtatt gggacctgca gacacggaat gtgaaggccc agtcacagac tgaccgagcg 360 aacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag 420 atgatgtatg getgegacgt ggggteggac gggegettee teegegggta eeggeaggac 480 gcctacgacg gcaaggatta catcgccttg aacgaggacc tgcgctcttg gaccgcggcg gacatggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagttg agagcetace tggagggeac gtgcgtggag tggeteegea gatacetgga gaacgggaag gagacgetge agegeaegga egeeceeaag aegeatatga eteaceaege tgtetetgae 660 catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggggggga ccagacccag gacacggagc ttgtggagac caggcctgca ggggatggaa cettecagaa gtgggegtet gtggtggtge ettetggaca ggagcagaga tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag 897

<210> 166

<211> 897

<212> DNA

<213> Homo sapiens

<400> 166

60 atggccgtca tggcgccccg aaccctcctc ctgctactct tgggggccct ggccctgacc 120 cagacetggg egggetecca etceatgagg tattteacca eateegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttt gacagegacg cegegageca gaggatggag cegegggeac egtggataga geaggagggg ccggagtatt gggacctgca gacacggaat gtgaaggccc agtcacagac tgaccgagcg 360 aacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag 420 atgatgtatg getgegaegt ggggteggae gggegettee teegegggta eeggeaggae 480 gcctacgacg gcaaggatta catcgccttg aacgaggacc tgcgctcttg gaccgcggcg gacatggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagttg

agagcetace tggagggcae gtgcgtggae gggeteegea gatacetgga gaacgggaag gagacgetge agegeaegga egececeaag aegeatatga etcaceaege tgtetetgae catgaggeca ecetgaggtg etgggeeetg agettetace etgeggagat cacactgace tggeagegga atggggagga ecagacecag gacacggage ttgtggagae eageetgea ggggatggaa ecttecagaa gtgggegtet gtggtggtge ettetggaca ggageagga tacacetgee atgtgeagea tgagggtetg eccaageeee teaceetgag atgggag	600 660 720 780 840 897
<210> 167	

<211> 546 <212> DNA

Homo sapiens <213>

<400> 167

geteceaete eatgaggtat tteaceaeat eegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggtttgae agegaegeeg cgagccagag gatggagccg cgggcaccgt ggatagagca ggaggggccg gagtattggg acctgcagac acggcatgtg aaggcccagt cacagactga ccgagcgaac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct gcgacgtggg gtcggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca aggattacat cgccttgaac gaggacetgc gctcttggac cgcggcggac atggcggctc agatcaccca gegeaagtgg gaggeggeee gtgtggegga geagttgaga geetacetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

60

120 180

300

360

240

<210> 168 <211> 546 <212> DNA

<213> Homo sapiens

<400> 168

geteceacte catgaggtat tteaceacat cegtgteeeg geeeggeege ggggageece getteatege egtgggetae gtggaegaea egeagttegt geggtttgae agegaegeeg cgagccagag gatggagccg cgggcaccgt ggatagagca ggaggggccg gagtattggg acctgcagac acggaatgtg aaggcccagt cacagactga ccgagcgaac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct gcgacgtggg gtcggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca aggattacat egeettgaac gaggacetge getettggac egeggeggac atggeggete agatcaccca gcgcaagtgg gaggcggccc atgaggcgga gcagcagaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

300 360 420

60

120

300

360

480

**540** 

546

420

180

240

480 540 546

<210> 169 <211> 546 <212> DNA <213> Homo sapiens

<400>

geteceacte catgaggtat tteaceacat cegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggtttgae agegaegeeg cgagccagag gatggagccg cgggcaccgt ggatagagca ggaggggccg gagtattggg acctgcagac acggaatgtg aaggcccagt cacagactga ccgagcgaac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct gcgacgtggg gtcggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca aggattacat cgccttgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

540

240

300

540 600

780

546

<210> 170 546 <211> <212> DNA

<213> Homo sapiens

<400>

60 geteceacte catgaggtat tteaceacat cegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggtttgae agegaegeeg 120 cgagccagag gatggagccg cgggcaccgt ggatagagca ggaggggccg gagtattggg 240 acetgeagae aeggaatgtg aaggeeeagt cacagaetga eegagegaae etggggaeee 300 tgegeggeta etacaaccag agegaggeeg gtteteacae eetecagatg atgtttgget gcgacgtggg gtcggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca 360 420 aggattacat cgccttgaac gaggacetgc gctcttggac cgcggcggac atggcggctc 480 agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 171 <211> 897 <212> DNA <213> Homo sapiens

<400>

60 atggccgtca tggcgccccg aaccetecte etgetaetet egggggeeet ggccetgaee 120 cagacetggg egggetecea etecatgagg tattteteca eateegtgte eeggeeegge 180 agtggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagagg 240 300 cctgagtatt gggaccagga gacacggaat gtgaaggccc agtcacagac tgaccgagtg 360 gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag 420 ataatgtatg getgegaegt ggggteggae gggegettee teegegggta tgaacageae 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcttg gaccgcggcg 540 gacatggcgg etcagatcac ccagcgcaag tgggaggcgg eccgttgggc ggagcagttg agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 600 gagacgetge agegeaegga ecceeccaag acacatatga eccaecacee eatetetgae 660 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca 840 ggggatggaa cettccagaa gtgggcgget gtggtggtge ettetggaga ggagcagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> 172 <211> 887 <212> **DNA** <213> Homo sapiens

#### <400> 172

60 atggccgtca tggcgccccg aaccetecte etgetaetet egggggecet ggccetgaee 120 cagacetggg egggetecea etceatgagg tattteteca cateegtgte eeggeeegge 180 agtggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagagg cctgagtatt gggaccagga gacacggaat gtgaaggccc actcacagac tgaccgagag 360 aacetgggga ccetgegegg etactacaac cagagegagg ceggttetea caccatecag 420 ataatgtatg getgegacgt ggggteggac gggegettee teegegggta tgaacageac 480 gcaaggatta catcgccctg aacgaggacc tgcgctcttg gaccgcggcg gacatggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtcgggc ggagcagttg agagcctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag gagacgctgc 660 agegeaegga ecceccaag acacatatga eccaccacce catetetgae catgaggeca 720 ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggcgget gtggtggtge ettetggaga ggagcagaga tacacetgce 840

atgtgcagca	+~~ ~~~tota	00000000000	tagagataga	otagana.
argioragra	LYMERELCUE	CCCaagcccc	LUACCULEAR	algegae

180

240

360

420

480

540

720

767

60

120

300

360

480

540 546

420

180

240

<210> 173

<211> 767

<212> DNA

<213> Homo sapiens

## <400> 173

ggctcccact ccatgaggta tttctccaca tccgtgtccc ggcccggcag tggagagccc 60 120 cgetteateg eagtgggeta egtggaegae aegeagtteg tgeggttega eagegaegee gcgagccaga ggatggagcc gcgggcgccg tggatagagc aggaggggcc ggagtattgg gaccaggaga cacggaatgt gaaggcccac tcacagactg accgagagaa cctggggacc 300 ctgcgcggct actacaacca gagcgaggcc ggttctcaca ccatccagat aatgtatggc tgcgacgtgg ggtcggacgg gcgcttcctc cgcgggtatg aacagcacgc ctacgacggc aaggattaca tegecetgaa egaggaeetg egetettgga eegeggegga eatggegget cagatcaccc agegeaagtg ggaggeggee egtegggegg ageagttgag agectacetg gagggeacgt gegtggagtg geteegeaga tacetggaga aegggaagga gaegetgeag 600 cgcacggacc ccccaagac acatatgacc caccaccca tctctgacca tgaggccacc 660 ctgaggtgct gggccctggg cttctaccct gcggagatca cactgacctg gcagcgggat ggggaggacc agacccagga cacggagctc gtggagacca ggcctgcagg ggatggaacc ttccagaagt gggcggctgt ggtggtgcct tctggagagg agcagag

<210> 174

<211> 546

<212> DNA

<213> Homo sapiens

### <400> 174

geteceacte catgaggtat ttetecacat cegtgteeeg geeeggeagt ggagageeee getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagaggcct gagtattggg accaggagac acggaatgtg aaggcccact cacagactga ccgagagaac ctggggaccc tgegeggeta etacaaceag agegaggeeg gtteteacae eateeagata atgtatgget gegacgtggg gteggacggg cgetteetee gegggtatga acageaegee tacgacggea aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gcgcaagtgg gaggcgccc atgtggcgga gcagtggaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 175

<211> 546

<212> DNA

<213> Homo sapiens

#### <400> 175

geteceacte catgaggtat ttetecacat cegtgteeeg geeeggeagt ggagageeee getteatege agtgggetae gtggaegaeg egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagaggcct gagtattggg accaggagac acggaatgtg aaggcccact cacagactga ccgagagaac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagata atgtatggct gcgacgtggg gtcggacggg cgcttcctcc gcgggtatga acagcacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gcgcaagtgg gaggcggccc atgtggcgga gcagtggaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

60 120

180 240 300

360 420

> 480 540

120

360

420

480

540

546

240

300

540

600

780

840

60

120

180

240 300

360

480

540

546

420

180

240 300

<210> 176 <211> 546 <212> DNA <213> Homo sapiens

<400>

geteceacte catgaggtat ttetecacat cegtgteeeg geeeggeagt ggagageeee getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagaggcct gagtattggg acgaggagac agggaaagtg aaggcccact cacagactga ccgagagaac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagata atgtatggct gcgacgtggg gtcggacggg cgcttcctcc gcgggtatga acagcacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agateaceca gegeaagtgg gaggeggeec gtegggegga geagttgaga geetacetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc

<210> 177 <211> 897 <212> DNA <213> Homo sapiens

<400>

60 atggccgtca tggcgccccg aaccetecte etgetaetet egggggccet ggccetgaec 120 cagacetggg egggetetea etceatgagg tatttetaea eetcegtgte eeggeeegge 180 agtggagage eccgetteat egcagtggge taegtggaeg acaegeagtt egtgeggtte gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagagg cctgagtatt gggaccagga gacacggaat gtgaaggccc agtcacagac tgaccgagtg 360 gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag 420 ataatgtatg getgegacgt ggggteggac gggegettee teegegggta tgaacageac 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcttg gaccgcggcg gacatggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgttgggc ggagcagttg agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 660 gagacgetge agegeaegga ecceeccaag acacatatga eccaecacce catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atgggggga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaga ggagcagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> 178 <211> 546 <212>DNA <213> Homo sapiens

<400>

geteceacte catgaggtat ttetecacat cegtgteeeg geeeggeagt ggagageeee getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagaggcct gagtattggg accaggagac acggaatgtg aaggcccact cacagactga ccgagagaac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagata atgtatggct gcgacgtggg gtcggacggg cgcttcctcc gcgggtatga acagcacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 179 822 <211> <212> DNA

<213> Homo sapiens

<400> 179	
gctcccactc catgaggtat ttctccacat ccgtgtcccg gcccggcagt ggagagcccc	60
getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg	120
cgagccagag gatggagccg cgggcgccgt ggatagagca ggagaggcct gagtattggg	180
accaggagac acggaatgtg aaggeeeact cacagactga eegagagaac etggggacee	240
tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagata atgcatggct	300
gcgacgtggg gtcggacggg cgcttcctcc gcgggtatga acagcacgcc tacgacggca	360
aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc	420
agateaceca gegeaagtgg gaggeggece gtegggegga geagttgaga geètacetgg	480
agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	540
gcacggaccc ccccaagaca catatgaccc accaccccat ctctgaccat gaggccaccc	600
tgaggtgctg ggccctgggc ttctaccctg cggagatcac actgacctgg cagcgggatg	660
gggaggacca gacccaggac acggagctcg tggagaccag gcctgcaggg gatggaacct	720
tccagaagtg ggcggctgtg gtggtgcctt ctggagagga gcagagatac acctgccatg	780
tgcagcatga gggtctgccc aagcccctca ccctgagatg gg	822

<210> 180

<211> 546

<212> DNA

<213> Homo sapiens

<400> 180gctcccactc catgaggtat ttctccacat ccgtgtcccg gcccggcagt ggagagcccc getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accaggagac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagata atgtatggct 300 360 gegaegtggg gteggaeggg egetteetee gegggtatga acageaegee tacgaeggea 420 aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc 480 agateaccea gegeaagtgg gaggeggece gttgggegga geagttgaga geetacetgg 540 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546

<210> 181

<211> 822

<212> DNA

<213> Homo sapiens

## <400>

geteceacte catgaggtat ttetecacat cegtgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagaggcct gagtattggg accaggagac acggaatgtg aaggcccact cacagactga ccgagagaac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagata atgtatggct gegaegtggg gteggaeggg egetteetee gegggtatga acageaegee taegaeggea  ${\tt aggattacat\ cgccctgaac\ gaggacctgc\ gctcttggac\ cgcggcggac\ atggcggctc}$ agatcaccca gcgcaagtgg gaggcggccc gtcgggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacggaccc ccccaagaca catatgaccc accaccccat ctctgaccat gaggccaccc tgaggtgctg ggccctgggc ttctaccctg cggagatcac actgacctgg cagcgggatg gggaggacca gacccaggac acggagctcg tggagaccag gcctgcaggg gatggaacct tccagaagtg ggcggctgtg gtggtgcctt ctggagagga gcagagatac acctgccatg tgcagcatga gggtctgccc aagcccctca ccctgagatg gg

720 780 822

60

120

180

240 300

360

420

600

660

480

540

<210> 182

<211> 897

DNA <212>

<213> Homo sapiens

<400> 182	
atggccgtca tggcgccccg aaccetecte etgetaetet tgggggccet ggccctgace	60
	120
cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc	180
gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagagg	240
cctgagtatt gggaccagga gacacggaat gtgaaggccc actcacagat tgaccgagtg	300
gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag	360
atgatgtatg gctgcgacgt ggggtcggac gggcgcttcc tccgcgggta ccagcaggac	420
gcctacgacg gcaaggatta catcgccttg aacgaggacc tgcgctcttg gaccgcggcg	480
gacatggegg ctcagatcac ccagegcaag tgggaggegg cccgtgtggc ggagcagttg	<b>54</b> 0
agagcctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag	600
gagacgetge agegeaegga cececcaag aegeatatga etcaccaege tgtetetgae	660
catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca	780
ggggatggaa cettecagaa gtgggegtet gtggtggtge ettetggaca ggagcagaga	840
tacacctgcc atgtgcagca tgagggtete eccaageeee teaccetgag atgggag	897

```
<210> 183
```

<211> 546 <212> DNA

<213> Homo sapiens

<400> 183

geteceaete catgaggtat teaceacat cegtgteceg geceggeege ggggagecee getteatege egtgggetae gtggacgaca egeagttegt geggttegae agegaegeeg egagecagag gatggageeg egggegeegt ggatagagea ggagaggeet gagtattggg accaggagae acggaaagtg aaggeecaet cacagattga eegagtggae etggggaeee tgegeggeta etacaaccag agegaggeeg gtteteacae eatecagatg atgtatgget gegaegtggg gteggaegge getteetee gegggtaeea geaggaegee tacgaeggea aggattacat egeettgaae gaggaeetge getettggae egeggeggae atggeggete agateacea gegeaagtgg gaggeggeee gtgtggegga geagttgaga geetaeetgg agggeaegtg egtgggagtgg eteegeagat acetggagaa egggaaggag acgetgeage geaegg

<210> 184

<211> 546

<212> DNA

<213> Homo sapiens

<400> 184

geteceaete catgaggtat tteaecaeat eegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egageeagag gatggageeg egggegeegt ggatagagea ggagaggeet gagtattgggaeeaetaeagagagae aceggagtga aaggeeeaet eacagattga eegagtggae etggggaeee tgegeggeta etaeaaeeag agegaggaeg gtteteaeae eatecagata atgtatgget gegaeegtggg gteggaeggg egetteetee gegggtaeeg geaggaeget taegaeggea aggattaeat egeeetgaae gaggaeetge getettggae egeggeggae atggeggee agateaeea gegeaagtgg gaggegeee gtgtggegga geagttgaga geetaeetgg agggeaegtg egtggagtgg eteegeagat aeetggagaa egggaaggag aegetgeage geaegg

<210> 185

<211> 897

<212> DNA

<213> Homo sapiens

<400> 185

atggccgtca tggcgccccg aaccetecte etgetaetet tgggggccet ggccctgace

 $\frac{60}{120}$ 

180

240 300

540

546

360

420 480

60

120

300

360

420 480

540

546

180

cagacetggg egggetecca etecatgagg tattteacea eateegtgte eeggeeegge	120
egeggggage eeegetteat egeegtggge taegtggaeg acaegcagtt egtgeggtte	180
gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagagg	240
cctgagtatt gggaccagga gacacggaat gtgaaggccc actcacagat tgaccgagtg	300
gacetgggga ecetgegegg etactacaac eagagegagg eeggttetea eaceateeag	360
ataatgtatg getgegaegt ggggteggae gggegettee teegegggta eeggeaggae	420
gettacgacg geaaggatta categeeetg aacgaggace tgegetettg gaeegeggeg	480
gacatggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagttg	<b>54</b> 0
agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag	600
gagacgetge agegeaegga ecceeccaag aegeatatga etcaccaege tgtetetgae	660
catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca	780
ggggatggaa cettecagaa gtgggegtet gtggtggtge ettetggaca ggageagaga	840
tacacctgcc atgtgcagca tgagggtctc cccaagcccc tcaccctgag atgggag	897

<210> 186 <211> 546 <212> DNA

<213> Homo sapiens

<400>

geteceacte catgaggtat tteaceacat cegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagaggcct gagtattggg accaggagac acggaatgtg aaggcccact cacagattga ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct gegaegtggg gteggaeggg egetteetee gegggtaeea geaggaegee taegaeggea  ${\tt aggattacat\ cgccttgaac\ gaggacctgc\ gctcttggac\ cgcggcggac\ atggcggctc}$ agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggacggg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

180

120

187 <210> <211> 546 <212> DNA

<213> Homo sapiens

<400> 187

60 geteceacte catgaggtat tteaceacat cegtgteeeg geeeggeege ggggageece 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagaggcct gagtattggg accaggagac acggaatgtg aaggcccact cacagattga ccgagtggac ctggggaccc 240 tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct gcgacgtggg gtcggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca aggattacat cgccttgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gegeaagtgg gaggeggeee gtgtggegga geagttgaga geetacetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

180

<210> 188 <211> 546 <212> DNA

<213> Homo sapiens

<400> 188

geteceacte catgaggtat tteaceacat cegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagaggcct gagtattggg

accaggagac acggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg cgctccgcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca gcaggacgcc tacgacggca aggattacat cgccttgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg	240 300 360 420 480 540 546
PompB	0.10

<210> 189

<211> 546

<212> DNA

<213> Homo sapiens

<400>

60 geteceacte catgaggtat tteaceacat cegtgteeeg geeeggeege ggggageece 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 acgaggagac agggaaagtg aaggcccact cacagactga ccgagagaac ctgcggatcg 300 cgctccgcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct 360 gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca gcaggacgcc tacgacggca aggattacat cgccttgaac gaggacctgc gctcttggac cgcggcggac atggcggctc 420 480 agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagttgaga gcctacctgg 540 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

180

546

60

120 180

300 360

420

480

540

546

240

<210> 190<211> 546

<212> DNA

Homo sapiens <213>

<400> 190

geteceacte catgaggtat tteaceacat cegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagaggcct gagtattggg accaggagac acggaatgtg aagggccact cacagattga ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca gcaggacgcc tacgacggca aggattacat cgccttgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 191

<211> 897

<212> DNA

<213> Homo sapiens

<400> 191

60 atggccgtca tggcgccccg aaccetecte etgetaetet tgggggccet ggccctgaec 120 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttt 240 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggaccagga gacacggaat gtgaaggccc actcacagac tgaccgagag 360 agectgegga tegegeteeg etactacaac cagagegagg eeggttetea caccatecag 420 atgatgtatg getgegaegt ggggeeggeetee teegegggta eeageaggae gectacgacg geaaggatta categeettg aacgaggace tgegetettg gacegeggeg 480 540 gacatggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagttg 600 agageetace tggagggeac gtgegtggag tggeteegea gatacetgga gaacgggaag

180

360

420

480

660 720

540

600

780

180

240

360

480

540

180 240

546

840

897

240

300

gagacgetge agegeaegga egececeaag aegeatatga eteaceaege tgtetetgae	660
catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggggagga ccagacccag gacacggagc ttgtggagac caggcctgca	780
ggggatggaa cettecagaa gtgggegtet gtggtggtge ettetggaca ggagcagaga	840
tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag	897

<210> 192 <211> 897 <212> DNA <213> Homo sapiens

<400> 192

atggccgtca tggcgccccg aaccetecte etgetaetet tgggggccet ggccetgaec 120 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttt gacagegacg cegegageca gaggatggag cegegggege egtggataga geaggagggg ccggagtatt gggaccagga gacacggaat gtgaaggccc actcacagac tgaccgagag agcetgegga tegegeteeg etaetacaac cagagegagg eeggttetea caccatecag atgatgtatg getgegaegt ggggeeggae gggegeetee teegegggta ceageaggae gcctacgacg gcaaggatta catcgccttg aacgaggacc tgcgctcttg gaccgcggcg gacatggcgg ctcagatcac ccagcgcaag tgggaggcgg cccatgtggc ggagcagcag agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaacgggaag gagacgetge agegeaegga egececeaag aegeatatga eteaceaege tgtetetgae catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggggga ccagacccag gacacggagc ttgtggagac caggcctgca ggggatggaa cettecagaa gtgggcgtet gtggtggtge ettetggaca ggagcagaga tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> 193 <211> 546 <212> DNA <213> Homo sapiens

<400> 193

60 geteceacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggtttgae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accaggagac acggaatgtg aaggcccact cacagactga ccgagagaac ctgcggatcg 300 cgctccgcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct gcgacgtggg gccggacggg cgcctcctcc gcgggtacca gcaggacgcc tacgacggca 420 aggattacat cgccttgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 194 <211> 546 <212> DNA <213> Homo sapiens

<400> 194

60 geteceacte catgaggtat ttetteacat cegtgteeeg geceggeege ggggageece 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accaggagac acggaatgtg aaggcccact cacagactga ccgagagagc ctgcggatcg 300 cgctccgcta ctacaaccag agcgaggccg gttctcacac catccagata atgtatggct 360 gcgacgtggg gtcggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca

 $\begin{array}{c} 360 \\ 420 \end{array}$ 

aggattacat egecetgaac gaggacetge getettggac egeggeggac atggeggete agateaceaa gegeaagtgg gaggeggece atgaggegga geagttgaga geetacetgg atggeaegtg egtggagtgg etcegeagat acetggagaa egggaaggag aegetgeage geaegg	420 480 540 546
<210> 195 <211> 897 <212> DNA <213> Homo sapiens	
atggccgtca tggcgccccg aaccetecte etgetaetet tgggggccct ggccctgacc cagacetggg egggetecea etceatgagg tatttettea eateegtgte eeggeegge egeggggage eegegteet egegggggge taegtggaeg acacgeagtt egtgeggttt gacagegaeg eegegggeea gaggatggag eegegggee egtggataga geaggaggg eegggattt gggaceagga gacagggaaa gtgaaggee eeteacagae tgacegagggaa ageetgegga tegegeteeg etaetacaae eagagegagg eeggttetea eaceateeag atgatgtatt getgegaegt ggggeeggae gggegeetee teegeggta eeageaggae geetaetaegae geetaegaeg gacaggae gggeegeetee teegeggta eeageaggae geetaetaegae gacatggegg eteagatae eategeettg aacgaggaee tgegetettg gacegeggg gacatggegg eteagateae eagegeaag tgggaggggeeetee tggetettg gacegeggg gaaettg agageetaee tggagggaae gtggggaggaggaeggeggeeetee tggaggaggaaggaaggaaggaaggeetee agegeaeggaag gaaetggaag gaaetggaag gaaetggaag eeeteeaag aegeatatga eteaceaege tgtetetgae eatgaggeea eeetgaggg etgggeeetg agettetaee etgeggagat eacaetgaee tggeageggg atggggagga eeagaeeeag gacaeggag ttgtggagae eageetgeaggggatggaa eetteeagaa gtgggegetet gtggtggtge ettetggaaa gaggeeggaagaagaa taeaeetgee atgtgeagea tgagggtetg eeeaageeee teaeeetgaagaagaagaagaagaagaagaagaagaagaagaagaa	
<210> 196 <211> 546 <212> DNA <213> Homo sapiens <400> 196 geteceacte catgaggtat ttetteacat cegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggacgaea egeagttegt geggtttgae agegaegeeg egageeagag gatggageeg egggeegeet ggatagagea ggaggggeeg gagtattgggaceacaggagae aceggaatgtg aaggeeeact cacagaetga eegagaggee egeteegeta etacaaceag agegaggeeg gtteteacae eatecagatg atgtatgget gegaegtggg geeggaeggg egeeteetee gegggtaeea geaggaegee tacgaeggea aggattacat egeettgaae gaggaeetge getettggae egeggeggae atggeggete agateaceea gegeaagtgg gaggeggeee atgtggegga geagttgaga geetaeetgg agggeacgtg egtggagtgg eteeggaagtgaa egggaaggagaa egggaagggaeetgg agggeacgtg egtggagtgg eteeggaagaa egggaaggaa acgetgeaggaagggaeegggeeeggaeeggaeeggaaggaa	60 120 300 240 300 360 420 480 540 546
<210> 197 <211> 546 <212> DNA <213> Homo sapiens <400> 197	
geteceacte catgaggtat teteceacat cegtgteceg geceggeege ggggageece getteatege egtgggetae gtggaegaea egeagttegt geggtttgae agegaegeeg egageeagag gatggageeg egggegeegt ggatagagea ggaggggeeg gagtattggg accaggagae acggaatgtg aaggeecaet cacagaetga eegagaggee etgeggateg egeteegeta etacaaccag agegaggeeg gtteteacae catecagatg atgtatgget	60 120 g 180 240 300 360

gcgacgtggg gccggacggg cgcctcctcc gcgggtacca gcaggacgcc tacgacggca aggattacat cgccttgaac gaggacctgc gctcttggac cgcggcggac atggcggctc

480 agatcaccca gegeaagtgg gaggeggece gtgtggegga geagttgaga geetacetgg 540 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546

PCT/JP2004/019763

240

600

780

240

300

540 600

780

840

60

120

180

240

<210> 198 <211> 897 <212> DNA <213> Homo sapiens

<400>

atggccgtca tggcgccccg aaccetecte etgetaetet tgggggccct ggccetgaec 60 120 cagacetggg egggetecca etceatgagg tattteacea eateegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggaccggaa cacacggaat gtgaaggccc actcacagat tgaccgagtg 360 gacetgggga ecetgegegg etactacaac cagagegagg eeggttetea caccatecag 420 atgatgtatg getgegacgt ggggteggac gggegettee teegegggta eeageaggac 480 gcctacgacg gcaaggatta catcgccttg aacgaggacc tgcgctcttg gaccgcggcg 540 gacatggegg ctcagatcac ccagegcaag tgggaggegg cccgtgtggc ggagcagttg agageetace tggagggeae gtgegtggag tggeteegea gacacetgga gaacgggaag 660 gagacgetge agegeaegga ecceeceagg aegeatatga etcaccaege tgtetetgae 720 catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggggga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggegtet gtggtggtge ettetggaca ggagcagaga 840 tacacctgcc atgtgcagca tgagggtctc cccaagcccc tcaccctgag atgggag 897

<210> 199 <211> 897 <212> **DNA** 

<213> Homo sapiens

<400>

60 atggccgtca tggcgcccg aaccetecte etgetaetet tgggggeeet ggccetgaee cagacetggg egggetecca etceatgagg tattteacca cateegtgte eeggeeegge 120 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacggaat gtgaaggccc actcacagat tgaccgagtg 360 gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag 420 atgatgtatg getgegacgt ggggteggac gggegettee teegegggta eeageaggae 480 gcctacgacg gcaaggatta catcgccttg aacgaggacc tgcgctcttg gaccgcggcg gacatggegg etcagatcae ecagegeaag tgggaggegg ecegtgtgge ggageagttg agageetace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 660 gagacgetge agegeaegga ecceccaag aegeatatga etcaccaege tgtetetgae 720 catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggcgtet gtggtggtge ettetggaca ggagcagaga 897 tacacetgce atgtgcagca tgagggtete eccaageece teaceetgag atgggag

<210> 200 <211> 546 <212> DNA

<213> Homo sapiens

<400> 200

geteceacte catgaggtat tteaceacat cegtgteeeg geceggeege ggggageece getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggcccact cacagattga ccgagtggac ctggggaccc

tgegeggeta etacaaceag agegaggeeg gtteteacae cateeagatg atgtatgget gegaegtggg gteggaeggg egetteetee gegggtacea geaggaegee tacgaeggea aggattacat egeettgaae gaggaeetga geteetggae egeggeggae atggeggete agateaceea gegeaagtgg gaggeggeee gtgtggegga geagttgaga geetacetgg agggeaegtg egtggagtgg eteegeagae acetggagaa egggaaggag aegetgeage geaegg	300 360 420 480 540 546
<210> 201 <211> 546 <212> DNA <213> Homo sapiens	
<400> 201 geteceacte catgaggtat tteaceacat cegtgteeeg geceggeege ggggageeee getteatege egtgggetae gtggacgaca egeagttegt geggttegae agegaegeeg egageeagag gatgageeg egggeeegt ggatagageg ggaggggeeg gagtattggg aceggaacac aceggaatgt aaggeeeact cacagattga eegagtggae etgggggeee tgegeeggeta etacaaceag agegaggeeg gtteteacac catecagatg atgtatgget gegacettggg gteggaegg egetteetee gegggtaeea geaggaegee tacgaeggea aggattaeat egeettgaae gaggaeetge getettggae egeggeggae atggeggee agateacea gegeaagtgg gaggeggeee gtgtggegga geagttgaga geetaeetgg aggeeacgtg egtggagtgg etecgeagae acetggagaa egggaaggag acgetgeage geacgg	60 120 180 240 300 360 420 480 540 546
<210> 202 <211> 739 <212> DNA <213> Homo sapiens	
c400> 202 gctccactc catgaggtat ttcaccacat ccgtgtcccg gcccgccgc ggggagcccc gcttcatcgc cgtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgccg cgagccagag gatggagccg cgggcgccgt ggatggagca ggaggggccg gagtattggg accggaacac acggaatgt aaggcccact cacagattga ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct gcgacgtggg gtcggacggg cgcttcctcc gcgggtacca gcaggacgcc tacgacggca aggattacat cgccttgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacggaccc ccccaagacg catatgactc accacgctgt ctctgaccat gaggccaccc tgaggtgctg ggccctgagc ttctaccctg cggagatcac actgacctgg cagcggatg gggaggacca gacccaggac acggagctcg tggagaccag gcctgcaggg gatggaacct tccagaagtg ggcgtctgt	60 120 180 240 300 360 420 480 540 600 660 720 739
<210> 203 <211> 897 <212> DNA <213> Homo sapiens	
<400> 203 atggccatca tggcgccccg aaccetcgtc etgetactet egggggccct ggccetgace cagacetggg egggetecca etccatgagg tatttetaca ecteegtgte eggecegge cgeggggage eccgetteat egeegtggge taegtggaeg acaegcagtt egtgeggtte gacagegaeg eegegageca gaggatggag eegegggege egtggataga geaggaggg ceggagtatt gggaceggaa cacaeggaaa gtgaaggee agteacagae tgacegagtg gacetgggaa eegtgegg etaetacaae cagaggagg acggttetaa caccatecag	60 120 180 3 240 300

gacetgggga ecetgegegg etactacaac cagagegagg aeggttetea caceatecag aggatgtatg getgegaegt ggggeeggae gggegettee teegegggta ecageaggae

gettacgacg geaaggatta categeeetg aacgaggace tgegetettg gacegeggeg

gacatggcgg ctcagatcac ccagcgcaag tgggagacgg cccatgaggc ggagcagtgg	<b>54</b> 0
agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag	600
gagacgetge agegeaegga egececeaag acacatatga etcaceaege tgtetetgae	660
catgaggeca ccctgaggtg ctgggccctg agettetace ctgcggagat cacactgace	720
tggcageggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca	780
ggggatggaa cettecagaa gtgggegtet gtggtggtge ettetggaca ggagcagaga	840
tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag	897

```
<210>
       204
<211>
       897
<212>
       DNA
```

<213> Homo sapiens

<400> 204

60 atggccgtca tggcgccccg aaccetcgte etgetaetet egggggccet ggccetgace 120 cagacetggg egggetecca etecatgagg tatttetaca eeteegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacggaat gtgaaggccc agtcacagac tgaccgagtg gacetgggga ecetgegegg etactacaac cagagegagg aeggttetea caccatecag ataatgtatg getgegacgt ggggteggac gggegettee teegegggta eeggeaggac gettacgacg geaaggatta categeeetg aacgaggace tgegetettg gaeegeggeg gacatggcgg ctcagatcac ccagcgcaag tgggagacgg cccatgaggc ggagcagttg agagcetace tggagggcae gtgcgtggag tggctccgca gatacetgga gaacgggaag gagacgetge agegeaegga egececeaag aegeatatga eteaceaege tgtetetgae catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggggga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa eettecagaa gtgggegtet gtggtggtge ettetggaca ggagcagaga tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

240

300

360

```
<210>
       205
<211>
       546
<212>
       DNA
```

<213> Homo sapiens

<400> 205

60 geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggacg gttctcacac catccagata atgtatggct gegaegtggg gteggaeggg egetteetee gegggtaeeg geaggaeget taegaeggea aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gcgcaagtgg gaggcggccc atgaggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

60

120

180

240

180

240

<210> 206 <211> 546 <212> DNA <213> Homo sapiens

<400>

geteceacte catgaggtat ttetacacet cegtgteeeg geceggeege ggggageece getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagaggccg gagtattggg accggaacac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc

tgcgcggcta ctacaaccag agcgaggacg gtteteacae catecagata atgtatgget gcgacgtggg gtcggacggg cgetteetee gcgggtaccg gcaggacget tacgacggea aggattacat egceetgaae gaggacetge getettggae egcggeggae atggeggete agateaceca gcgcaagtgg gagacggeee atgaggegga gcagttgaga gcetacetgg agggeacgtg egtggagtgg etcegcagat acetggagaa egggaaggag acgetgeage geacgg	300 360 420 480 540 546
,	

<210> 207

<211> 546

<212> DNA

<213> Homo sapiens

<400> 207

60 geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accggaacac acggaaagtg aaggeceagt cacagactga cegagtggac etggggacce 300 tgcgcggcta ctacaaccag agcgaggacg gttctcacac catccagagg atgtatggct 360 gcgacgtggg gccggacggg cgcttcctcc gcgggtacca gcaggacgct tacgacggca 420 aggattacat etceetgaac gaggacetge getettggae egeggeggae atggeggete 480 agatcaccca gegeaagtgg gagaeggeee atgaggegga geagtggaga geetacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

540 546

180

208 <210>

<211> 897

<212> DNA

<213> Homo sapiens

<400>

atggeegtea tggegeeceg aaccetecte etgetaetet egggggeect ggeeetgace 60  ${\tt cgcggggagc\ cccgcttcat\ cgccgtgggc\ tacgtggacg\ acacgcagtt\ cgtgcggttc}$ gacagcgacg ccgcgagcca gaagatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccagga gacacggaat atgaaggccc actcacagac tgaccgagcg aacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccatccag ataatgtatg getgegacgt ggggeeggac gggegettee teegegggta eeggeaggac gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcttg gaccgcggcg gacatggcag ctcagatcac caagcgcaag tgggaggcgg tccatgcggc ggagcagcgg agagtetace tggagggeae gtgegtggag tggeteegea gatacetgga gaacgggaag gagacgetge agegeaegga ecceeccaag acacatatga eccaecace catetetgae catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaga ggagcagaga tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

120 180 240 300

360 420

480 540

600 660

720 780

840 897

<210> 209

<211> 546

<212> DNA

<213> Homo sapiens

<400> 209

60 geteceacte catgaggtat ttetteacat eegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagaa gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accaggagac acggaatatg aaggcccact cacagactga ccgagcgaac ctggggaccc tgcgcggcta ctacaaccag agcgaggacg gttctcacac catccagata atgtatggct

120

180 240

300

540

600

780

840

120

300

360

420 480

180

240

540

546

gcgacgtggg gccggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca	360
aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcagctc	420
agatcaccaa gcgcaagtgg gaggcggtcc atgcggcgga gcagcggaga gcctacctgg	480
atggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	<b>54</b> 0
gcacgg	546

```
210<211> 897
<210>
```

<212> DNA

<213> Homo sapiens

<400> 210

60 atggccgtca tggcgccccg aaccetecte etgetaetet egggggccct ggccetgace 120  ${\bf cagacetggg}\ {\bf cgggetecca}\ {\bf ctccatgagg}\ {\bf tatttettea}\ {\bf catccgtgte}\ {\bf ceggeeegge}$ 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaagatggag ccgcgggcgc cgtggataga gcaggaggg ccggagtatt gggaccagga gacacggaat atgaaggccc actcacagac tgaccgagcg 360 aacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccctccag 420 atgatgtatg getgegaegt ggggeeggae gggegettee teegegggta eeggeaggae 480 gectacgacg geaaggatta categeeetg aacgaggace tgegetettg gaeegeggeg gacatggcag ctcagatcac caagcgcaag tgggaggcgg tccatgcggc ggagcagcgg agagtetace tggagggeae gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegeaegga ecceeceaag acacatatga eccaecacee catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaga ggageagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> 211

<211> 546

<212> DNA

<213> Homo sapiens

### <400> 211

60 geteceacte catgaggtat ttetteacat eegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagaa gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accaggagac acggaatatg aaggcccact cacagactga ccgagcgaac ctggggaccc  $tgegeggeta\ ctacaaccag\ agegaggaeg\ gttctcacac\ catccagata\ atgtatggct$ gcgacgtggg gccggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca  ${\tt aggattacat\ cgccctgaac\ gaggacctgc\ gctcttggac\ cgcggcggac\ atggcagctc}$ agatcaccaa gcgcaagtgg gaggcggtcc atgcggcgga gcagcggaga gtctacctgg agggccggtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 212

<211> 897

<212> DNA

<213> Homo sapiens

## <400> 212

atggeegtea tggegeeeeg aaccetegte etgetaetet egggggeeet ggeeetgaee 60 120 cagacetggg egggetecea etceatgagg tatttetaca ecteegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc 240 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggacctgca gacacggaat gtgaaggccc actcacagac tgaccgagcg 360 aacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccatccag 420 aggatgtatg getgegaegt ggggeeggae gggegettee teegegggta ceageaggae

gcttacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcttg gaccgcggcg	480
gacatggcgg ctcagatcac ccagcgcaag tgggagacgg cccatgaggc ggagcagtgg	540
agagectace tggagggeeg gtgcgtggag tggeteegea gatacetgga gaaegggaag	600
gagacgetge agegeaegga egececeaag aegeatatga eteaceaege tgtetetgae	660
catgaggcca ccctgaggtg ctgggccctg agettctacc ctgcggagat cacactgacc	720
tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca	780
ggggatggga cettecagaa gtgggegtet gtggtggtge ettetggaca ggagcagaga	840
tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag	897

<210> 213 <211> 897 <212> DNA <213> Homo sapiens

213 <400>

60 atggccgtca tggcgccccg aaccctcgtc ctgctactct cgggggccct ggccctgacc 120 cagacetggg egggetecea etceatgagg tatttetaca ceteegtgte eeggeeegge 180 egeggggage eeegetteat egeegtggge taegtggaeg acaegcagtt egtgeggtte gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg 240 300 ccggagtatt gggaccggaa cacacggaat gtgaaggccc agtcacagac tgaccgagtg 360 gacctgggga ccctgcgcgg ctactacaac cagagcgagg acggttctca caccatccag 420 aggatgtatg getgegaegt ggggeeggae gggegettee teegegggta eeageaggae gettacgacg geaaggatta categeeetg aacgaggace tgegetettg gaeegeggeg 480 gacatggcgg ctcagatcac ccagcgcaag tgggagacgg cccatgaggc ggagcagtgg 540 600 agagectace tggagggeeg gtgegtggag tggeteegea gatacetgga gaacgggaag gagacgetge agegeaegga egececeaag aegeatatga eteaceaege tgtetetgae 660 catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc 720 tggcageggg atggggggga ccagacccag gacacggagc tcgtggagac caggcctgca 780 ggggatggga cettecagaa gtgggcgtet gtggtggtge ettetggaca ggagcagaga 840 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag 897

<210> 214 <211> 897 <212> DNA <213> Homo sapiens

<400> 214

60 atggccgtca tggcgccccg aaccetegte etgetaetet egggggccet ggccetgaee 120 cagacetggg egggetecca etceatgagg tatttetaea ceteegtgte eeggeeegge cgeggggage ceegetteat egeegtggge taegtggaeg acaegeagtt egtgeggtte 180 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacggaat gtgaaggccc agtcacagac tgaccgagtg 360 gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag 420 aggatgtatg getgegaegt ggggeeggae gggegettee teegegggta ceageaggae gettacgacg gcaaggatta categecetg aacgaggace tgegetettg gacegeggeg 480 gacatggegg ctcagatcac ccagegcaag tgggagacgg cccatgagge ggagcagtgg agagectace tggagggega gtgegtggag tggeteegea gatacetgga gaaegggaag gagacgetge agegeaegga egececeaag aegeatatga etcaceaege tgtetetgae 660 720 catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggggga ccagacccag gacacggagc tcgtggagac caggcctgca 840 ggggatggaa ccttccagaa gtgggcgtct gtggtggtgc cttctggaca ggagcagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

240

300

540

600

780

<210> 215 <211> 546 <212> DNA

<213> Homo sapiens

240

			_	_	-
<11	M	·>	2	ı	<b>5</b>

geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageece 60 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 180 accggaacac acggaatgtg aaggcccact cacagactga ccgagtggac ctggggaccc 240 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagagg atgtatggct 360 gcgacgtggg gccggacggg cgcttcctcc gcgggtacca gcaggacgct tacgacggca 420 aggattacat cgccctgaac gaggacetgc gctcttggac cgcggcggac atggcggctc 480 agateaceca gegeaagtgg gagaeggeec atgaggegga geagtggaga geetacetgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acctgcagc **540** 546 gcacgg

<210> 216

<211> 546

<212> DNA

<213> Homo sapiens

## <400> 216

60 geteceacte catgaggtat ttetacacet cegtgteceg geceggeege ggggageece 120 getteatege egtgggetae gtggaegaea egcagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 180 240 accggaacac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggacg gttctcacac catccagagg atgtatggct 360 gcgacgtggg gccggacggg cgcttcctcc gcgggtacca gcaggacgct tacgacggca 420 aggattacat cgccctgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gcgcaagtgg gagacggccc atgaggcgga gcagtggaga gcctacctgg 480 540 agggccggtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 217

<211> 897

<212> DNA

<213> Homo sapiens

## <400> 217

60 atggeegtea tggegeeeeg aaccetegte etgetaetet egggggeeet ggeeetgaee 120 cagacetggg egggetecea etceatgagg tatttetaca ecteegtgte eeggeeegge 180 egeggggage eeegetteat egeegtggge taegtggaeg acaegeagtt egtgeggtte gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacggaat gtgaaggccc agtcacagac tgaccgagtg 300 360 gacetgggga ecetgegegg etaetacaac cagagegagg eeggttetea caccatecag 420 atgatgtatg getgegaegt ggggteggae gggegettee teegegggta eeggeaggae 480 gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg 540 gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagtgg 600 agageetace tggagggeae gtgcgtggag tggeteegea gatacetgga gaaegggaag 660 gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae 720 catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc 780 tggcagcggg atgggggga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa ccttccagaa gtgggtggct gtggtggtgc cttctggaca ggagcagaga 840 897 tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

<210> 218

<211> 897

<212> DNA

<213> Homo sapiens

atggccgtca tggcgccccg aaccetegte etgetactet egggggccct ggccetgace cagacetggg egggetecca etceatgagg tatttetaca etteegtgte eeggeeegge	60 120
cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc	180
gacagegaeg cegegageca gaggatggag cegegggege egtggataga geaggagggg	240
ccggagtatt gggaccggaa cacacggaat gtgaaggccc agtcacagac tgaccgagtg	300
gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag	360
atgatgtatg getgegaegt ggggteggae gggegettee teegegggta eeggeaggae	420
gcctacgacg gcaaggatta categeectg aaagaggace tgegetettg gacegeggeg	480
gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagtgg	<b>54</b> 0
agagcetace tggagggeae gtgcgtggag tggctccgca gatacetgga gaacgggaag	600
gagacgetge agegeacgga egececeaaa aegeatatga eteaceaege tgtetetgae	660
catgaagcca ccctgaggtg ctgggccctg agettctacc ctgcggagat cacactgacc	720
tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca	780
ggggatggaa ccttccagaa gtgggtggct gtggtggtgc cttctggaca ggagcagaga	840
tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag	897

<210> 219

<211> 897

<212> DNA

<213> Homo sapiens

<400> 219

60 atggccgtca tggcgccccg aaccctcgtc ctgctactct cgggggccct ggccctgacc  ${\tt cagacctggg}\ {\tt cgggctccca}\ {\tt ctccatgagg}\ {\tt tatttctaca}\ {\tt cctccatgtc}\ {\tt ccggcccggc}$ 120 180 cgeggggage ceegetteat egeegtggge taegtggaeg acaegeagtt egtgeggtte 240 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggaccggaa cacacggaat gtgaaggccc agtcacagac tgaccgagtg 360 gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag 420 aggatgtatg getgegacgt ggggecggac gggegettee teegegggta ceaceagtae 480 gcctacgacg gcaaggatta categeeetg aaagaggace tgegetettg gaeegeggeg 540 gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagtgg 600 agagcctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 660 gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae 720catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggggggga ccagacccag gacacggagc tcgtggagac caggcctgca 840 ggggatggaa cettecagaa gtgggtgget gtggtggtge ettetggaca ggagcagaga 897 tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

<210> 220

<211> 897

<212> DNA

<213> Homo sapiens

<400> 220

60 atggccgtca tggcgccccg aaccetcgtc ctgctactct cgggggccct ggccctgacc 120 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacggaat gtgaaggccc actcacagac tgaccgagtg 360 gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag 420 atgatgtatg getgegaegt ggggteggae gggcgettee teegegggta eeggeaggae 480 gcctacgacg gcaaggatta catcgccctg aaagaggacc tgcgctcttg gaccgcggcg gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagtgg agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae 660 720 catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca 840 ggggatggaa cettecagaa gtgggtgget gtggtggtge ettetggaca ggagcagaga

240

300

540

600

780

180

240

360 420

480

540

546

tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

<210> 221 <211> 546 <212> DNA <213> Homo sapiens <400> 221 geteteacte catgaggtat ttetacaett cegtgteeeg geeeggeege ggggageece 60 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggcccact cacagactga ccgagtggac ctggggaccc 240 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct 360 gegacgtggg gteggacggg cgetteetee gegggtaceg geaggacgee tacgacggea 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagtggaga gcctacctgg 480 540 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcacgg <210> 222 <211> 546 <212> DNA <213> Homo sapiens <400> 222 60 geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accggaacac acggaatgtg aaggeecact cacagattga ccgagtggac ctggggacce 300 tgegeggeta etacaaceag agegaggeeg gtteteacae cateeagatg atgtatgget 360 gegacgtggg gteggacggg egetteetee gegggtaceg geaggacgee tacgacggea aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc 420 480 agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagtggaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 546 gcacgg <210> 223 <211> 546 <212> DNA <213> Homo sapiens <400>

60 geteceacte catgaggtat ttetacaett eegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggcccact cacagactca ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct gcgacgtggg gtcggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagtggaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 224 <211> 546 <212> DNA <213> Homo sapiens

180

240

480

540

546

240

300 360

> 540 600

> > 780

840

420 480

660

<400>	224

60 geteceacte catgaggtat ttetacaett cegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 180 cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accggaacac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct 360 gcgacgtggg gtcggacggg cgcttcctcc gcgggtatga acagcacgcc tacgacggca 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc 480 agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagtggaga gcctacctgg 540 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

225 <210>

<211> 546

<212> DNA

<213> Homo sapiens

### <400>

60 geteceacte catgaggtat ttetacaett cegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct 300 360 gcgacgtggg gtcggacggg cgcttcctcc gcgggtaccg gcagcacgcc tacgacggca aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc 420 agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagtggaga gcctacctgg agggeaegtg egtggagtgg etcegeagat acetggagaa egggaaggag aegetgeage gcacgg

<210> 226

<211> 897

<212> DNA

<213> Homo sapiens

# <400>

60 atggccgtca tggcgccccg aaccetcgtc ctgctactct cggggggccct ggccctgacc 120 cagacetggg egggetecca etceatgagg tatttetaca eetcegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacggaat gtgaaggccc agtcacagac tgaccgagtg gacetgggga ecetgegegg etactacaac cagagegagg eeggttetea caccatecag atgatgtatg gctgcgacgt ggggtcggac gggcgcttcc tccgcgggta ccggcaggac gcctacgacg gcaaggatta categeeetg aaagaggace tgcgctettg gaccgcggcg gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagctg agagcetace tggagggeae gtgcgtggag tggctccgca gatacetgga gaacgggaag gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae 720 catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atgggggga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa ccttccagaa gtgggtggct gtggtggtgc cttctggaca ggagcagaga tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag 897

<210> 227

<211> 546

<212> DNA

<213> Homo sapiens

WO 2005	5/063985	76 / 752		PCT/JP20
getteate egageca aceggaa tgegegge gegaegt aggatta agaceae	227  the catgaggtat thetacactt cegtgtoge catgaggtae gtggacgaca egeaggag gatggageeg egggegeegt ggatcac acggaatgtg aaggeeeagt cacacta etacaaccag agegaggeeg gttetggg gteggaegg egetteetee gegg gteggaegg egetteetee at egeeetgaaa gaggaeetge getetcaa geacaagtgg gaggeggeee at egtgagtgg eteegeagat acetggg egtggagtgg eteegeagat acetggg	ttegt geggttegae a tagagea ggaggggee tgaetga eegagtggae cacae catecagatg a taceg geaggaegee t ttggae egeggeggae a	gcgacgccg g gagtattggg c ctggggaccc atgtatggct tacgacggca atggcagctc a gcctacctgg	60 120 180 240 300 360 420 480 540 546
<210> <211> <212> <213>	228 546 DNA Homo sapiens			
getteate egageca acgagga tgegegg gegaegt aggatta agaccae	228 ctc catgaggtat ttctacacct ccgtgto cgc cgtgggctac gtggacgaca cgcag gag gatggagccg cgggcgccgt ggal agac acggaatgtg aaggcccagt cac cta ctacaaccag agcgaggccg gttct ggg gtcggacggg cgcttcctcc gcggg cat cgccctgaaa gaggacctgc gctct caa gcacaagtgg gaggcggccc atg cgtg cgtggagtgg ctccgcagat acct	tttegt geggttegae a tagagea ggagggee agaetga eegagtgga cacae cateeagatg a ttaceg geaggaegee ttggae egeggeggae tggeegga geagtggag	gegaegeeg g gagtattggg e etggggaeee atgtatgget taegaeggea atggeagete a geetaeetgg	60 120 180 240 300 360 420 480 540 546
<210> <211> <212> <213>	229 579 DNA Homo sapiens		·	
tccatga gccgtgg aggatgg	229 . tec tgetactete gggggeeetg geeetg: ggt atttetacae tteegtgtee eggeee; get acgtggaega caegeagtte gtge; gage egegggegee gtggatagag cag	ggee geggggagee ee ggtteg acagegaege e gagggge eggagtatt	getteate ] egegageeag g ggaeeggaae	60 120 180 240 300

acacggaatg tgaaggccca gtcacagact gaccgagtgg acctggggac cctgcgcggc 300 tactacaacc agagegagge eggtteteac accatecaga tgatgtatgg etgegaegtg 360 420 gggtcggacg ggcgcttcct ccgcgggtac cggcaggacg cctacgacgg caaggattac 480 ategecetga aagaggacet gegetettgg acegeggegg acatggeage teagateace aagcacaagt gggaggcggc ccatgtggcg gagcagtgga gagcctacct ggagggcacg **54**0 579 tgcgtggagt ggctccgcag atacctggag aacgggaag

<210> 230 <211> 866 <212> DNA <213> Homo sapiens

<400> 230

60 atggeegtea tggegeeceg aaccetegte etgetaetet egggggeeet ggeeetgaee  ${\it cagacctggg}\ {\it cgggctccca}\ {\it ctccatgagg}\ {\it tatttctaca}\ {\it cctccgtgtc}\ {\it ccggcccggc}$ 120 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc 240 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggaccggga gacacggaat gtgaaggccc agtcacagac tgaccgagtg

ggggatggaa cettecagaa gtgggtgget gtggtggtge ettetggaca ggagcagaga 840 tacacetgce atgtgcagca tgaggg 866
--

<210> 231

<211> 546

<212> DNA

<213> Homo sapiens

### <400> 231

60 geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg acgaggagac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct 360 gcgacgtggg gtcggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagtggaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

180

240

480

540

60

120

180

240

300

360

420

480

540

546

546

<210> 232

<211> 546

<212> **DNA** 

<213> Homo sapiens

## <400> 232

geteceacte catgaggtat ttetacacet ceatgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggcccact cacagactca ccgagtggac ctggggaccc tgegeggeta etacaaccag agegaggeeg gtteteacae eatecagagg atgtatgget gcgacgtggg gccggacggg cgcttcctcc gcgggtacca ccagtacgcc tacgacggca aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagtggaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 233

<211> 615

<212> DNA

<213> Homo sapiens

## <400> 233

cegteatgge geecegaace etegteetge tacteteggg ggeectggee etgacecaga 60 120 cctgggcggg ctcccactcc atgaggtatt tctacacttc cgtgtcccgg cccggccgcg 180 gggageceeg etteategee gtgggetaeg tggacgacae geagttegtg eggttegaea 240 gegacgcege gagccagagg atggagcege gggcgcegtg gatagagcag gaggggcegg 300 agtattggga ccggaacaca cggaatgtga aggcccagtc acagactgac cgagtggacc tggggaccct gegeggetae tacaaccaga gegaggeegg tteteacacc atccagatga 360

300

540 600

780

840

60

120

300

360

420

480

540

546

180

180

240

tgtatggctg cgacgtgggg tcggacgggc gcttcctccg cgggtaccgg caggacgcct	420
acgacggcaa ggattacatc gccctgaaag aggacctgcg ctcttggacc gcggcggaca	480
tggcagctca gaccaccaag cacaagtggg aggcggccct tgtggcggag cagtggagag	540
cctacctgga gggcacgtgc gtggagtggc tccgcagata cctggagaac gggaaggaga	600
cgctgcagcg cacgg	615

<210> 234

<211> 897

<212> DNA

<213> Homo sapiens

<400>

60 atggeegtea tggegeeceg aaccetegte etgetaetet egggggeect ggeeetgace 120  ${\tt cagacetggg}\ {\tt cgggctccca}\ {\tt ctccatgagg}\ {\tt tatttctaca}\ {\tt cttccgtgtc}\ {\tt ccggcccggc}$ 180 cgeggggage ceegetteat egeegtggge taegtggaeg acaegeagtt egtgeggtte gacagegacg cegegageca gaggatggag cegegggege egtggataga geaggagggg ccggagtatt gggaccggaa cacacggaat gtgaaggccc agtcacagac tgaccgagtg 360 gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag 420 atgatgtatg getgegaegt ggggteggae gggegettee teegegggta eeggeaggte 480 gectaegaeg geaaggatta categeeetg aaagaggaee tgegetettg gaeegeggeg gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagtgg agagcetace tggagggcae gtgcgtggag tggctccgca gatacetgga gaacgggaag 660 gagacgetge agegeaegga egececeaaa aegeatatga eteaceaege tgtetetgae 720 catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggtgget gtggtggtge ettetggaca ggagcagaga 897 tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

<210> 235

<211> 546

<212> DNA

<213> Homo sapiens

<400> 235

geteceacte catgaggtat ttetacaett eegtgteeeg geeeggeege ggggageece getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggccg gagtattggg accggaacac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct gcgacgtggg gtcggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagtggaga gcctacctgg atggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg

<210> 236

<211> 546

<212> DNA

<213> Homo sapiens

<400>

60 geteceacte catgaggtat ttetacaett eegtgteeeg geeeggeege ggggageeee 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggcccact cacagactca ccgagtggac ctggggaccc 240 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct 360 gcgacgtggg gtcggacggg cacttcetee gcgggtaccg gcaggacgce tacgacggca

300

360

420

480 540

546

240

300

480

540 600

780 840

180

240

480

180

240

aggattacat cgccctgaaa gaggacctgc getettggac cgcggcggac atggcagetc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagtggaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcacgg	420 480 540 546
•	

<210> 237 <211> 546 <212> DNA <213> Homo sapiens

<400> 237

60 geteceacte catgaggtat ttetacactt cegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct gegacgtggg gteggacggg egetteetee gegggtaceg geaggacgee tacgacggea aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagtggaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa ccggaaggag acgctgcagc gcacgg

<210> 238 <211> 897 <212> DNA <213> Homo sapiens

<400> 238

atggeegtea tggegeeeeg aaccetegte etgetaetet egggggeeet ggeeetgaee 60 120 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagegaeg cegegageca gaggatggag cegegggege egtggataga geaggagggg ccggagtatt gggaccggaa cacacggaat gtgaaggccc agtcacagac tgaccgagtg 360 gacetgggga ecetgeaegg etactacaac eagagegagg eeggttetea eaceateeag 420 atgatgtatg getgegaegt ggggteggae gggegettee teegegggta eeggeaggae gcctacgacg gcaaggatta catcgccetg aaagaggace tgcgctettg gaeegeggeg gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagtgg agagcetace tggagggcae gtgcgtggag tggctccgca gatacetgga gaacgggaag 660 gagacgetge agegeacgga egececeaaa aegeatatga eteaceaege tgtetetgae catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggggggga ccagacccag gacacggagc tcgtggagac caggcctgca ggggatggaa cettecagaa gtgggtgget gtggtggtge ettetggaca ggagcagaga 897 tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag

<210> 239 <211> 546 <212> DNA <213> Homo sapiens <400> 239

geteceacte catgaggtat ttetacaett eegtgteeeg geeeggeege ggggageeee 60 120 getteatege egtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acggaatgtg aaggcccagt cacagactga ccgagtggac ctggggaccc 300 tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagagg atgtatggct 360 gcgacgtggg gtcggacggg cgcttcctcc gcgggtaccg gcaggacgcc tacgacggca 420 aggattacat cgccctgaaa gaggacctgc gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gaggcggccc atgtggcgga gcagtggaga gcctacctgg

240

240

300

420

540 600

780

840

agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 gcacgg 546

<210> 240

<211> 897

<212> DNA

<213> Homo sapiens

<400> 240atggccgtca tggcgccccg aaccetcgtc ctgctactct cggggggccct ggccctgacc cagacetggg egggeteeca etceatgagg tatttetaca ecteegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggaccggaa cacacggaat gtgaaggccc agtcacagac tgaccgagtg gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccgtccag 360 aggatgtatg getgegacgt ggggteggac tggegettee teegegggta ceaceagtae 420 480 gectacgacg geaaggatta categeeetg aaagaggace tgegetettg gaeeggegg **54**0 gacatggcag ctcagaccac caagcacaag tgggaggcgg cccatgtggc ggagcagttg 600 agagectace tggagggeae gtgcgtggag tggeteegea gatacetgga gaaegggaag 660 gagacgetge agegeaegga egececcaaa aegeatatga eteaceaege tgtetetgae 720 catgaagcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggggagga ccagacccag gacacggagc tcgtggagac caggcctgca 840 ggggatggaa cettecagaa gtgggegget gtggtggtge ettetggaca ggagcagaga tacacctgcc atgtgcagca tgagggtttg cccaagcccc tcaccctgag atgggag 897

<210> 241

<211> 897

<212> DNA

<213> Homo sapiens

# <400> 241

60 atggccgtca tggcgccccg aaccctcctc ctgctactct tgggggccct ggccctgacc 120 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttt 180 gacagegacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccagga gacacggaat gtgaaggccc actcacagac tgaccgagtg 360 gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag atgatgtatg getgegacgt ggggeeggac gggegeetee teegegggta ceageaggae 480 gcctacgacg gcaaggatta categeettg aacgaggace tgcgctettg gaccgeggeg gacatggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagttg agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 660 gagacgetge agegeaegga egececeaag aegeatatga eteaceaege tgtetetgae 720 catgaggcca ccctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacacggagc ttgtggagac caggcctgca ggggatggaa cettecagaa gtgggegtet gtggtggtge ettetggaca ggagcagaga 897 tacacctgcc atgtgcagca tgagggtctg cccaagcccc tcaccctgag atgggag

<210> 242

<211> 619

<212> DNA

<213> Homo sapiens

#### <400> 242

60 atggccgtca tggcgccccg aaccetecte etgetaetet tgggggecet ggccetgace 120 cagacetggg egggetecca etecatgagg tatttettea cateegtgte eeggeeegge 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttt 240 gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggaccagga gacacggaat gtgaaggccc actcacagac tgaccgagtg

gacctgggga ccctgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag	360
atgatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggta ccagcaggac	420
gcctacgacg gcaaggatta catcgccttg aacgaggacc tgcgctcttg gaccgcggcg	480
gacatggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagttg	540
agagcctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag	600
gagacgctgc agcgcacgg	619

<210> 243

<211> 619

<212> DNA

<213> Homo sapiens

<400> 243

60 atggccgtca tggcgccccg aaccetecte etgetaetet tggggggccet ggccetgaec 120 180 cgcggggagc cccgcttcat cgccgtgggc tacgtggacg acacgcagtt cgtgcggttt gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccagga gacacggaat gtgaaggccc actcacagac tgaccgagtg 300 360 gacetggega ceetgegegg etactacaac cagagegagg eeggttetea caccatecag 420 atgatgtatg getgegaegt ggggeeggae gggegeetee teegegggta eeageaggae 480 gcctacgacg gcaaggatta catcgccttg aacgaggacc tgcgctcttg gaccgcggcg gacatggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagttg 540 600 agagcetace tggagggeae gtgcgtggag tggctccgca gatacetgga gaacgggaag gagacgctgc agcgcacgg

240

619

180

240

540

120

300

180

240

360

480

540

**420** 

547

<210> 244

<211> 547

<212> DNA

<213> Homo sapiens

# <400> 244

60 ggeteceaet ceatgaggta tttetteaea teegtgteee ggeeeggeeg eggggageee 120 cgetteateg cegtgggeta egtggaegae aegeagtteg tgeggtttga eagegaegee gcgagccaga ggatggagcc gcgggcgccg tggatagagc aggagggtcc ggagtattgg gacggggaga cacggaaagt gaaggcccac tcacagactg accgagtgga cctggggacc 300 ctgcgcggct actacaacca gagcgaggcc ggttctcaca ccatccagat gatgtatggc 360 tgcgacgtgg ggccggacgg gcgcctcctc cgcgggtacc agcaggacgc ctacgacggc 420 aaggattaca tegeettgaa egaggaeetg egetettgga eegeggegga eatggegget 480 cagatcacce agegeaagtg ggaggeggee egtgtggegg ageagttgag agectacetg gagggcacgt gcgtggagtg gctccgcaga tacctggaga acgggaagga gacgctgcag cgcacgg

<210> 245

<211> 546

<212> **DNA** 

<213> Homo sapiens

## <400> 245

60 geteceacte catgaggtat ttetteacat eegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggaegaea egeagttegt geggtttgae agegaegeeg cgagccagag gatggagccg cgggcgccgt ggatagagca ggagggccg gagtattggg accaggagac acggaatgtg aaggcccact cacaggctga ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct gcgacgtggg gccggacggg cgcctcctcc gcgggtacca gcaggacgcc tacgacggca aggattacat cgccttgaac gaggacctgc gctcttggac cgcggcggac atggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagttgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc

gcacgg

546

<210> 246 <211> 545

<212> DNA

<213> Homo sapiens

<400> 246

geteceaete catgaggtat tetteacat cegtgteeeg geeeggeege ggggageeee getteatege egtgggetae gtggacgaca egcagttegt geggtttgae agegaegeeg egageeagag gatggageeg egggeeget ggatagagea ggaggggeeg gagtattggg accaggagae acggaatgtg aaggeeeaet cacagaetea eegagtggae etggggaeee tgegeeggeta etacaaceag agegaggeeg gtteteacae catecagatg atgtatgget gegaegtggg geeggaegge geeteetee gegggtaeea geaggaegee tacgaeggea aggattaeat egeettgaae gaggaeetee getettggae egeggeggae atggeggee agateacea gegeaagtgg gaggeggeee gtgtggeega geagttgaga geetaeetgg agggeaegte egtggagtgg eteegeagat acetggagaa egggaaggag aegetgeage geaeg

60

120

300 360

420 480

540

545

180 240

<210> 247

<211> 546

<212> DNA

<213> Homo sapiens

<400> 247

geteceaete eatgaggtat ttetteaeat eegtgteeeg geeggeege ggggageece getteatege egtgggetae gtggacgaca egcagttegt geggtttgae agegaegeege gagtattggg accaggagae aeggaatgtg aaggeeeget ggatagagea ggaggggeeg gagtattggg accaggagae aeggaatgtg aaggeeege gtteteaeae eatecagatg atgtatgget gegaegtggg geeggaegge geeteetee gegggtaeea atgaggeegee aggataeae aggataeae gegeaagtgg gaggegeee gtettggae egeggeggae atggeggee aggaeggeee agggeaeggee gtgggaggaeggeeggaeggeee gtgtggegga geagttgaga geetaeetgg agggeaegg egeteeteegagaa eegggaaggag aegetgeaeg geaegg

180

480 540 546

<210> 248

<211> 546

<212> DNA

<213> Homo sapiens

<400> 248

geteceaete eatgaggtat teetteaeat eegtgteeeg geceggeege ggggageeee getteatege egtgggetae gtggacgaca egcagttegt geggtttgae agegacgeeg egageeagag gatggageeg egggeeget ggatagagea ggaggggeeg gagtattggg accaggagae acggaatgtg aaggeeeaet cacagactga eegagtggae etggggaeee tgegeeggeta etacaaceag agegaggeeg gtteteaeae eatecagatg atgtatgget gegacgtggg geeggaegge egeeteetee gegggtaeea geaggaegee tacgaeggea aggattaeat egeettgaae gaggaeetee getettggae egeggeggae atggeggete agateaeea gegeaagtgg gaggegeea gtgtggegga geagttgaga geetaeetgg agggeaegtg egtggagtgg eteegaat acetggagaa egggaaggag aegetgeage geaegg

300 360 **42**0

480 540

546

<210> 249

<211> 546

<212> DNA

<213> Homo sapiens

PCT/JP2004/019763

```
<400> 249
geteceacte catgaggtat ttetteacat cegtgteece geeeggeege ggggageece
                                                                  60
getteatege egtgggetae gtggaegaea egeagttegt geggtttgae agegaegeeg
                                                                   120
                                                                      180
cgagccagag gatggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg
accaggagac acggaatgtg aaggcccact cacagactga ccgagtggac ctggggaccc
                                                                     240
tgcgcggcta ctacaaccag agcgaggccg gttctcacac catccagatg atgtatggct
                                                                   300
                                                                    360
gcgacgtggg gccggacggg cgcctcctcc gcgggtacca gcaggacgcc tacgacggca
aggattacat cgccttgaac gaggacctgc gctcttggac cgcggcggac atggcggctc
                                                                   420
                                                                    480
agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagttgaga gcctacctgg
                                                                     540
agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc
                                                                       546
gcacgg
<210>
        250
<211> 897
<212>
        DNA
        Homo sapiens
<213>
<400>
        250
                                                                  60
atggccgtca tgccgcccg aaccetecte etgetaetet egggggeeet ggccetgaee
                                                                  120
cagacetggg caggetecea etecatgagg tatttettea eateegtgte eeggeeegge
                                                                  180
cgeggggage ceegetteat cgeagtggge tacgtggacg actegeagtt cgtgcagtte
                                                                      240
gacagcgacg ccgcgagcca gaggatggag ccgcgggcgc cgtggataga gcaggaggag
                                                                     300
ccggagtatt gggacgagga gacacggaat gtgaaggeec acteacagac taaccgageg
                                                                    360
aacetgggga ccctgcgcgg ctactacaac cagagcgagg acggttetca caccatccag
                                                                   420
ataatgtatg getgegaegt ggggteggae gggegettee teegegggta eeggeaggae
                                                                   480
gcctacgacg gcaaggatta catcgcctg aacgaggacc tgcgctcttg gaccgcggcg
                                                                     540
gacatggcgg ctcagatcac caagcgcaag tgggaggcgg cccgtcgggc ggagcagctg
                                                                     600
agagectace tggagggega gtgegtggae gggeteegea gatacetgga gaaegggaag
                                                                   660
gagacgetge agegeaegga ecceeccaag acacatatga eccaecace catetetgae
catgaggcca ctctgaggtg ctgggccctg agcttctacc ctgcggagat cacactgacc
                                                                  720
tggcageggg atggggggga ccagacccag gacaeggage tegtggagae caggeetgea
                                                                     780
                                                                     840
ggggatggaa cettecagaa gtgggegget gtggtggtae ettetggaaa ggagaagaga
                                                                   897
tacacctgcc atgtgcagca tgagggtctg cccgagcccc tcaccctgag atgggag
<210>
        251
<211>
        16 .
<212>
        DNA
<213>
        Homo sapiens
<400> 251
                                                                      16
gccccgcttc atcgcc
<210>
        252
<211>
        19
        DNA
<212>
<213>
        Homo sapiens
<400> 252
                                                                         19
gaccaggaga cacggaata
<210>
        253
<211>
        17
<212>
        DNA
<213>
        Homo sapiens
<400> 253
                                                                        17
gcggagcagc ggagagt
```

<210>	254				
<211>	17				
<212>	DNA			•	
<213>	Homo sapiens				
-210	mone capione				
-4005	074				
	254				1.7
agtctaco	ctg gagggcc				17
				<b>b</b>	
<210>	255		•		
<211>	17				
<212>	DNA				
<213>	Homo sapiens				
	•				
<400>	255				
					17
gtctacci	gg agggccg				11
	•				
<210>	256				
<211>	16				
		•			
<212>	DNA				
<213>	Homo sapiens				
<400>	256				
	ggg ccctgg				16
aggigci	ggg cccigg				
<210>	257				
<211>	17				
<212>					
<213>					
~213/	Homo sapiens				
	~ <del>-</del>				
<400>					
ggtggtg	cct tctggag				17
<210>	258				
<211>					
	DNA				
<213>	Homo sapiens				
<400>	258				
	aga tgggagct				18
cacccig	aga igggagui				20
<210>	259			•	
<211>	17				
<212>					
<213>	Homo sapiens				•
<400>	259				
ccctgag	atg ggagctg				17
0	, 5 55-6				
-010-	900				
<210>	260				
<211>	19	•	•		
<212>	DNA				
<213>		/			

WO 2005/063985	85 / 752	PCT/JP2004/019763
<400> 260 ggacatggca gctcagatt		19
<210> 261 <211> 20 <212> DNA <213> Homo sapiens		
<400> 261 cactccatga ggtatttctc		20
<210> 262 <211> 16 <212> DNA <213> Homo sapiens		
<400> 262 ccggcccggc agtgga		16
<210> 263 <211> 19 <212> DNA		
<213> Homo sapiens <400> 263		
ttctcacacc atccagatg		19
<210> 264 <211> 17 <212> DNA		
<213> Homo sapiens <400> 264 ccatgcggcg gagcagt		17
<210> 265	•	<del>-</del> 1
<211> 17 <212> DNA <213> Homo sapiens		
<400> 265 catgcggcgg agcagtt		17
<210> 266 <211> 18 <212> DNA		
<213> Homo sapiens <400> 266 atagagcagg agaggcct		18
.010		

<210> 267 <211> 18

<b>WO 2</b> 005/	063985	86 / 752		PCT/JP2004/019763
<212> <213>	DNA Homo sapiens			
<400>				•
ctcacag	act gaccgaga		•	18
<210>	268			
<211>			Υ	•
<212> <213>	Homo sapiens		,	
<400>				•
ctacaac	cag agcgaggc			18
<210>				
<211>				
<212> <213>	Homo sapiens			
<400>				10
gagtcta	cct ggagggct	,		18
<210>		, .		
<211> <212>				
<212> <213>				
<400>				10
gtggacg	gaca egcagtta			18
<210>				
<211> <212>				
<213>	Homo sapiens			·
<400>				17
igetaeu	etc ggggget			. 17
<210>				·
<211> <212>				
	Homo sapiens			
<400>	272			
ggcccac	tca cagactc			17
<210>	273			
<211>	17			
<212> <213>	DNA Homo sapiens			
<400>		·		
	tct cacaccg			` <b>17</b>

<210>	274					
<211>	18					
<212>						
<213>	Homo sapiens					
		,				
<400>						
ttctcaca	cc gtccagag			·		18
				,	4	
<210>	275					
<211>						
<212>						
	Homo sapiens					
1210-	Homo bapions					
<400>	275					
						17
cgacgig	ggg tcggact					1,
~ ~ ~						
<210>						
	16					
<212>						
<213>	Homo sapiens					
<400>	276					
gggagg	egge ceatgt					16
000 00	00 0					
<210>	277					
	18					
<212>						
<213>	Homo sapiens					
44005	0.77				•	
<400>	277					10
ccatgtg	gcg gagcagtt					18
	•					
<210>	278					
<211>	17					
<212>	DNA					
<213>	Homo sapiens					
•	•		-			
<400>	278					
	tgg agggcac					17
Bootago	*66 ~666 ~~					
					•	
<210>	279					
	17					
<211>						
	DNA					
<213>	Homo sapiens					
	•					
<400>	279					
gagctgt	tggt cgctgct					17
	- <del>-</del> - <del>-</del>					
<210>	280					
<211>	17					
<211>	DNA					
<213>	Homo sapiens					

WO 2005/063985	88 / 752	PCT/JP2004/019763
<400> 280 agccccgctt catcgca		17
<210> 281 <211> 17 <212> DNA <213> Homo sapiens	•	
<400> 281 ccggagtatt gggacgg	i,	17
<210> 282 <211> 18 <212> DNA <213> Homo sapiens		
<400> 282 gacggggaga cacggaaa <210> 283 <211> 16 <212> DNA <213> Homo sapiens		18
<400> 283 cctccgcggg taccac		16
<210> 284 <211> 17 <212> DNA <213> Homo sapiens <400> 284 ccgcgggtac caccagt		17
<210> 285 <211> 19 <212> DNA <213> Homo sapiens		
<400> 285 ggattacatc gccctgaaa		19
<210> 286 <211> 18 <212> DNA <213> Homo sapiens		
<400> 286 ggacatggca gctcagac		18
<210> 287 <211> 17 <212> DNA <213> Homo sapiens		

WO 2005/063985		89 / 752	y .	PCT/JP2004/019763
<400> 287 gggcacgtgc gtggagt				17
<210> 288 <211> 18 <212> DNA <213> Homo sapien	s			
<400> 288 gcccactcac agactcat			,	18
<210> 289 <211> 17 <212> DNA <213> Homo sapien	s .			
<400> 289 tgcgctcttg gaccgca				17
<210> 290 <211> 20 <212> DNA <213> Homo sapien	s			
<400> 290 attacatcgc cctgaaagaa	ı			20
<210> 291 <211> 16 <212> DNA <213> Homo sapien	s			
<400> 291 ggggtcggac tggcga				16
<210> 292 <211> 15 <212> DNA <213> Homo sapien	ıs			
<400> 292 teceggeeeg geegt				15
<210> 293 <211> 19 <212> DNA	.e	·		
<213> Homo sapier <400> 293 catgtgcagc atgagggtt				19
<210> 294 <211> 18				

<212> DNA

WO 2005/063985	90 / 752	PCT/JP2004/019763
<213> Homo sapiens <400> 294 gaccagaccc aggacaca		18
<210> 295 <211> 17 <212> DNA <213> Homo sapiens		
<400> 295 ccatgtggcg gagcagt		17
<210> 296 <211> 17 <212> DNA <213> Homo sapiens		
<400> 296 cggactggcg cttcctg		17
<210> 297 <211> 18 <212> DNA <213> Homo sapiens		
<400> 297 ccaagcacaa gtgggaga		18
<210> 298 <211> 17 <212> DNA <213> Homo sapiens		
<400> 298 tgggagacgg cccatga		17
<210> 299 <211> 17 <212> DNA <213> Homo sapiens		
<400> 299 ccatgaggcg gagcagt		17
<210> 300 <211> 20 <212> DNA <213> Homo sapiens		
<400> 300 ccatgaggta tttctacacc		20
<210> 301 <211> 18		

WO 2005/063985	91 / 752	PCT/JP2004/019763
<212> DNA <213> Homo sapien	s	
<400> 301 caccgtccag aggatgtg		. 18
<210> 302 <211> 17 <212> DNA		
<213> Homo sapien <400> 302 gtggagacca ggcctga	.s	17
<210> 303 <211> 18 <212> DNA		
<213> Homo sapien <400> 303 caccgtccag aggatgtt		18
<210> 304 <211> 18 <212> DNA		
<213> Homo sapien <400> 304 gaaggeecac teacagat	as	18
<210> 305 <211> 17 <212> DNA		
<213> Homo sapier <400> 305 catgtggcgg agcagca	as	17
<210> 306 <211> 16 <212> DNA <213> Homo sapier	ıs	
<400> 306 gggaggcggc ccatga		16
<210> 307 <211> 17 <212> DNA <213> Homo sapier	ns	

<400> 307

catgaggcgg agcagca

<213> Homo sapiens

	,					
<210>	308					
<211>						
<211>						
		•				
<213>	Homo sapiens			•		
<400>	308					
gcctacct	gg agggcga					. 17
				•		
<210>	309					
<211>	19					•
<212>						
	Homo sapiens					
<b>\</b> 210>	Homo sapiens					
<400>	309					
						19
acacccu	cca gatgatgtt					13
	310					
<211>	17					
<212>	DNA					
<213>	Homo sapiens					
<400>	310		ř			
gaggtgo	tgg gccctga					17
000-0	-888 0					
<210>	311					
<211>						
<211>						
<213>	Homo sapiens					
	011					
<400>	311					1.0
ggaccgo	ggc ggacaa			•		16
	,					
		•				
<210>	312					
<211>	18				•	
<212>						
<213>	Homo sapiens					
<400>	312					
	ctca ccgagtgg					18
	0 0 00					
<210>	313		*			
<211>		•				
<211>						
<213>	Homo sapiens					
: -400:	010					
<400>	313					10
cgcggcg	ggac atggcg					16
<210>						
<211>	18					
<212>						
	Homo caniens					

WO 2005/063985	93 / 752	PCT/JP2004/019763
<400> 314 gtccggagta ttgggacg		18
<210> 315 <211> 17		
<212> DNA <213> Homo sapiens		
<400> 315 acggggagac acggaac		17
<210> 316 <211> 18		
<212> DNA <213> Homo sapiens		
<400> 316 cagtgggcta cgtggaca		18
<210> 317 <211> 17		•
<212> DNA <213> Homo sapiens		
<400> 317 tgggagacgg cccatgt		17
<210> 318 <211> 18		
<212> DNA <213> Homo sapiens		
<400> 318 ccatgaggcg gagcagtt		18
<210> 319 <211> 18		
<212> DNA <213> Homo sapiens		
<400> 319 agctcagacc accaagca		18
<210> 320 <211> 17 <212> DNA <213> Homo sapiens		
<400> 320 catgcggcgg agcagca		17
<210> 321		

<210> 321 <211> 18

WO 2005	5/063985		94 / 752	PCT/JP2004/019763
<212> <213>	DNA Homo sapiens			
<400> cgtggat	321 aga gcaggaga	·		18
<210> <211> <212> <213>	16		,	
<400> gacgggg	322 gaga cacggc			16
<400>	16 DNA Homo sapiens			16
<210> <211> <212> <213>	16		,	
<400> tcgacag	324 ega egeegg			16
<210> <211> <212> <213>	18			
<400> caccgtc	325 cag aggatgtc			18
<210><211><211><212><213>	- 18			
<400> cggaaa	326. gtga aggcccag			18
<210><211><211><212><213>	17 DNA			
<400> ggccca	327 gtca cagactc			17

WO 2005/063985	95 / 752	•	PCT/JP2004/019763
<210> 328 <211> 18 <212> DNA <213> Homo sapiens			
<400> 328 ggctcagatc accaagca			18
<210> 329 <211> 17 <212> DNA <213> Homo sapiens		. \$	
<400> 329 gcggagcagt tgagagc			17
<210> 330 <211> 16 <212> DNA <213> Homo sapiens	· ·		
<400> 330 gggcacgtgc gtggag			16
<210> 331 <211> 15 <212> DNA <213> Homo sapiens		·	
<400> 331 gtgggaggcg gcccg		·	15
<210> 332 <211> 16 <212> DNA <213> Homo sapiens			
<400> 332 gggaggcggc ccgtgt			16
<210> 333 <211> 17 <212> DNA <213> Homo sapiens			
<400> 333 ccgcgggtac cagcagt			17
<210> 334 <211> 17 <212> DNA <213> Homo sapiens			

<400> 334

<b>WO 2</b> 005	/063985	96 / 752	PCT/JP2004/019763
ggagcco	ege tteatet	•	17
<210><211><211><211><212><213>	18		
<400> gaccage	335 gaga cacggaaa	<b>,</b>	18
<210> <211> <212> <213>	18		
<400> attggga	336 acga ggagacag		18
<210><211><211><211><212><213>	18		
<400> gacgag	337 gaga cagggaaa		18
<210><211><211><211><212><213>	18		
<400> gaaggc	338 ccac tcacagag		18
	339 20<212> DNA Homo sapiens		
<400> gaggta	339 tttc ttcacatcca		20
<210><211><211><212><213>	18		
<400> ttcctcca	340 gcg ggtatgaa		18
<210> <211>			

<212> DNA <213> Homo sapiens

WO 2005/063985	97 / 752	PCT/JP2004/019763
<400> 341 gagtattggg accggaac		18
<210> 342 <211> 18 <212> DNA <213> Homo sapiens		
<400> 342 cggaatgtga aggcccag	<b>\$</b>	18
<210> 343 <211> 17 <212> DNA <213> Homo sapiens		
<400> 343 ggccggttet cacaccc		17
<210> 344 <211> 18 <212> DNA <213> Homo sapiens		
<400> 344 ttctcacacc ctccagag		18
<210> 345 <211> 15 <212> DNA <213> Homo sapiens		·
<400> 345 ccggcccggc cgcga		15
<210> 346 <211> 17 <212> DNA <213> Homo sapiens		
<400> 346 cgcgggtacc accagtt		17
<210> 347 <211> 18 <212> DNA <213> Homo sapiens		
<400> 347 cacagactga ccgagtgg		18
<210> 348 <211> 19 <212> DNA		

WO 2005/063985	98 / 752	PCT/JP2004/019763
<213> Homo sapiens		•
<400> 348 gttgagagcc tacctggat		19
<210> 349 <211> 17 <212> DNA <213> Homo sapiens		
<400> 349 catgaggcgg agcagct		17
<210> 350 <211> 18 <212> DNA <213> Homo sapiens		
<400> 350 ctgagagcct acctggat		18
<210> 351 <211> 18 <212> DNA <213> Homo sapiens		
<400> 351 tggatagagc aggagggt		18
<210> 352 <211> 18 <212> DNA <213> Homo sapiens		
<400> 352 cagagagect acctggat		18
<210> 353 <211> 17 <212> DNA <213> Homo sapiens		
<400> 353 ggcctggttc tccttgc		17
<210> 354 <211> 18 <212> DNA <213> Homo sapiens		
<400> 354 gagagectae etggatge		18

WO 2005/	063985	:	99 / 752		PCT/JP2004/019763
<210><211><211><212><213>	16				
<400> ggctgcg	355 acg tggggt			•	16
<212>	16				
<400> gggccgg	356 tgc gtggag				16
<400>	16 DNA Homo sapiens				16
<210><211><211><212><213>	17				
<400> gctcttgg	358 gac cgcggca				17
<210><211><211><212><213>	359 15 DNA Homo sapiens				
<400> ggcccgg	359 ccg cggga				. 15
<211> <212>	360 16 DNA Homo sapiens				
<400> gggagg	360 cggc ccgtga				16
<212>	361 17 DNA Homo sapiens				

<400> 361

WO 2005/063985	100 / 752	PCT/JP2004/019763
cgtgaggcgg agcagca		17
<210> 362 <211> 17 <212> DNA <213> Homo sapiens	•	·
<400> 362 ggcageteag ateaceg		17
<210> 363 <211> 16 <212> DNA <213> Homo sapiens		•
<400> 363 gccggacggg cgctta		16
<210> 364 <211> 17 <212> DNA <213> Homo sapiens		
<400> 364 geagagagee tacetge		17
<210> 365 <211> 18 <212> DNA <213> Homo sapiens		
<400> 365 gccggagtat tgggacct		18
<210> 366 <211> 18 <212> DNA <213> Homo sapiens		
<400> 366 ggcagetcag atcaccag		18
<210> 367 <211> 15 <212> DNA <213> Homo sapiens		
<400> 367 ggaggcggcc cgtcg		15
<210> 368 <211> 18 <212> DNA		

WO 2005/	063985	101 / 752	PCT/JP2004/019763
<213>	Homo sapiens		
<400> acgagga	368 agac agggaaag		18
<210><211><211><212><213>	16		
<400> cccagcc	369 cae egteca	•	16
<210> <211> <212> <213>	17		
<400> ccgtgtg;	370 gcg gagcagt	·	17
<210><211><211><212><213>	17		
<400> gcggago	371 cagt ggagagc		17
<210> <211> <212> <213>			
<400> ggcaag	372 gatt acatcgcct		19
<211> <212>			
<400> cgtgtgg	373 cgg agcagtt		17
<210> <211> <212> <213>		••.	
<400> ctcccac	374 tcc atgaggtg		18

WO 2005	5/063985	102 / 752	PCT/JP2004/019763
<210> <211> <212> <213>	18		
<400>	375 cta ctacaacg		18
<210><211><211><212><213>	16		
<400> ctgcgga	376 tcg cgctcc		16
<210> <211> <212> <213>	17		•
<400> gcggago	377 cagc agagagc		17
<210> <211> <212> <213>	17		
<400> atettece	378 eag cccaccg		17
<210> <211> <212> <213>	379 18 DNA Homo sapiens		· .
<400> ctgggct	379 tet accetgea		18
<210> <211> <212> <213>	380 18 DNA Homo sapiens		
<400>	380 cacc accagtat		18
<210><211><211><212><213>	381 17 DNA Homo sapiens		
			•

<400> 381

WO 2005/063985	103 / 752	PCT/JP2004/019763
agacgctgca gcgcact		17
<210> 382 <211> 17 <212> DNA <213> Homo sapiens	,	
<400> 382 ggcggctcag atcaccc	i,	17
<210> 383 <211> 18 <212> DNA <213> Homo sapiens		
<400> 383 gggaaagtga aggcccag		18
<210> 384 <211> 17 <212> DNA <213> Homo sapiens		
<400> 384 cctgggcagg ctcccaa		17
<210> 385 <211> 17 <212> DNA <213> Homo sapiens		
<400> 385 gggcacgtgc gtggact		17
<210> 386 <211> 17 <212> DNA <213> Homo sapiens		
<400> 386 gacgggcget teeteca		17
<210> 387 <211> 16 <212> DNA <213> Homo sapiens		
<400> 387 ggaccgcggc ggacag		16
<210> 388 <211> 18 <212> DNA		

WO 2005/063985		104 / 752		PCT/JP2004/019763
<213>	Homo sapiens			
<400> cggagta	388 attg ggacgagc			18
<210><211><211><212><213>	18		ķ	
<400> acagact	389 gac cgagagag			18
<210><211><211><212><213>	17			
<400> ccagagg	390 gatg gagccgt			17
<210><211><211><212><213>	18			
<400> gagccaş	391 gagg atggaget			18
<210> <211> <212> <213>				
<400> gctccca	392 ctc catgage			17
	393 16 DNA Homo sapiens			
<400> gcctgca	393 aggg gatggg			16
<210> <211> <212> <213>	17			
	394 caag tgggaga			17

WO 2005	//063985	105 / 752		PC'	Г/ЈР2004/019763
<210> <211> <212> <213>	17				
<400>	395 tac cagcaga		•		17
<210> <211> <212> <213>	17		ķ		
<400> gcctacct	396 gg agggeet				17
<210> <211> <212> <213>	16				
<400> tccgcggg	397 gta ccagcg				16
<210><211><211><212><213>	17				
<400> ttcctccg	398 cg ggtacca				17
<210> <211> <212> <213>	399 17 DNA Homo sapiens				
<400> ggtacca	399 gca ggacget				17
<211> <212>	400 17 DNA Homo sapiens				
<400> cgcagtt	400 cgt gcggttg			·	17
<210><211><212><213>	401 17 DNA Homo sapiens				

<400> 401

<213> Homo sapiens

<400> 407

<210> 408 <211> 17 <212> DNA

gggaggcggc ccgtc

WO 2005/06398	5	107 / 752	PCT/JP2004/019763
<213> Hom	o sapiens		
<400> 408 gggctacgtg gg	acgacg		17
<210> 409 <211> 19 <212> DNA			
<213> Hom <400> 409 cacaccatcc ag			19
<210> 410 <211> 18 <212> DNA <213> Hom			
<400> 410 gtgcagcatg a			18
<210> 411 <211> 17 <212> DNA <213> Hon			
<400> 411 ggtaccggca g	gacgct		17
<210> 412 <211> 20<5 <213> Hon			
<400> 412 ccactccatg as	ggtatttca		20
<210> 413 <211> 18 <212> DNA <213> Hon		.* .*	
<400> 413 gacacggaat g	rtgaaggg		18
<210> 414 <211> 20< <213> Hor			
<400> 414			20
<210> 415 <211> 15 <212> DN <213> Hor	A		

WO 2005/063985	108 / 752	PCT/JP2004/019763
<400> 415 ggccggacgg gcgcc		15
<210> 416 <211> 17 <212> DNA <213> Homo sapiens		•
<400> 416 gcctacctgg atggcac	Š	17
<210> 417 <211> 17 <212> DNA <213> Homo sapiens		
<400> 417 tggcacgtgc gtggagt		17
<210> 418 <211> 18 <212> DNA <213> Homo sapiens		·
<400> 418 gaccaggaga cagggaaa	·	. 18
<210> 419 <211> 16 <212> DNA <213> Homo sapiens		
<400> 419. gcacggaccc ccccag		16
<210> 420 <211> 17 <212> DNA <213> Homo sapiens		
<400> 420 acgaggacct gagetee		17
<210> 421 <211> 17 <212> DNA <213> Homo sapiens		
<400> 421 gcgccgtgga tagagcg	•	17
<210> 422 <211> 16		

WO 200	5/063985	109 / 752	PCT/JP2004/019763
<212> <213>	DNA Homo sapiens		
<400> gcgggcg	422 accg tggatg		16
<400>	17 DNA Homo sapiens 423		 17
<210>	gtg ggcatce		17
<211> <212>	16		
<400> ctgcago	424 gca cggacg		16
<210><211><211><212><213>	16		
<400>	425 cccc aagacg		16
<210> <211> <212> <213>	19		
<400> ctctttg	426 gag ctgtgatcg		19
<210><211><211><212><213>	19		
<400> gacggc	427 aagg attacatct		19
	428 17 DNA Homo sapiens	·	
<400> gtctace	428 etgg agggcac		17

<210>	429		•		•
<211>	18				
<212>	DNA				
<213>	Homo sapiens				
1210	Homo suprome			·	
<400>	429				
	cct acctggat				18
CEEUEUE	cor acceptate				
				<b>,</b>	
<210>	430				
<211>	17				
<212>	DNA				
<213>	Homo sapiens			•	
·10·	nome supreme	•			
<400>	430	*			
	tct cacaccc				17
55ac55t	oco cacacoc			•	
<210>	431				
<211>					
<212>					
	Homo sapiens				
-210-	Tiomo bapiono				
<400>	431				•
	gtgc gtggagt				17
999-9-6	3-8-8-8-8-				
<210>	432				
<211>		•			
<212>					
	Homo sapiens				
	1101110 Dup-1-1-1				
<400>	432				
	ctc cgcagac		,	•	17
660-66	9				
	,				
<210>	433				
<211>	19				
<212>	DNA				
<213>	Homo sapiens				
	-				
<400>	433				
gaacctt	cca gaagtgggt				19
-					
<210>			•		,
<211>	20<212> DNA				
<213>	Homo sapiens				
	•				
<400>	434				
ccatgag	gta tttctacact				20
<210>					
	20<212> DNA				
<213>	Homo sapiens				
<400>					
gaggta	tttc tacacctcca				20

WO 2005/0639	985	111 / 752	PC	Г/ЈР2004/019763
<210> 436 <211> 16 <212> DNA <213> Hon	<b>A</b>			
<400> 436 cgcgggtacc g	gcagc		•	16
<210> 437 <211> 17 <212> DNA <213> Hor			V .	
<400> 437 catgtggcgg a	gcaget			17
<210> 438 <211> 17 <212> DN <213> Hor	A			
<400> 438 gccggagtat t	•			17
<210> 439 <211> 16 <212> DN <213> Hor	A			
<400> 439				16
<210> 440 <211> 16 <212> DN <213> Hor	A			
<400> 440 gcgggtaccg (				16
<210> 441 <211> 18 <212> DN <213> Hor	A			
<400> 441 tggagagcct				18
<210> 442 <211> 16 <212> DN <213> Ho	ÍΑ			

ctcctccgcg ggtacca

<210> 449 <211> 17 <212> DNA 17

WO 2005	5/063985	113 / 752	PCT/JP2004/019763
<213>	Homo sapiens		
<400> gaccgag	449 tgg acctggc		17
<210> <211> <212> <213>	17	· · ·	
<400> gaaggco	450 ccac tcacagg		17
<210><211><211><212><213>	18		
<400> cacagat	451 tga ccgagtgg		18
<210> <211> <212> <213>	17		
<400> caagtgg	452 ggag gcggcca		17
<210><211><211><212><213>	18		
<400> cttcaca	453 tcc gtgtcccc		18
<210> <211> <212> <213>	18		
<400> cagccca	454 acca tecceatt		18
<210> <211> <212> <213>	18		
<400> cttcatc	455 gcc gtgggcta		18

WO 2005/063985		114 / 752	PC	CT/JP2004/019763
<210> 456 <211> 19 <212> DNA <213> Homo sa			:	
<400> 456 acacggaata tgaa	ggccc		•	19
<210> 457 <211> 17 <212> DNA <213> Homo sa	apiens		<b>V</b>	· · · · · · · · · · · · · · · · · · ·
<400> 457 gcggagagtc tacct	gg			17
<210> 458 <211> 16 <212> DNA <213> Homo sa	apiens			
<400> 458 ggagggccgg tgcg	tg			16
<210> 459 <211> 16 <212> DNA <213> Homo sa	apiens			
<400> 459 ggagggccgg tgcg	tg			16
<210> 460 <211> 17 <212> DNA <213> Homo s	apiens		·	
<400> 460 gggccctggg cttct				17
<210> 461 <211> 17 <212> DNA <213> Homo s	apiens			
<400> 461 gtggtggtgc cttct	gg			17
<210> 462 <211> 18 <212> DNA <213> Homo s	apiens			

WO 2005/063985	115 / 752	PCT/JP2004/019763
ccttctggag aggagcag		18
<210> 463 <211> 19 <212> DNA <213> Homo sapiens		
<400> 463 agctcagatt accaagcgc		19
<210> 464 <211> 19 <212> DNA <213> Homo sapiens		
<400> 464 ggtatttete cacateegt		19
<210> 465 <211> 16 <212> DNA <213> Homo sapiens		
<400> 465 ggcagtggag agcccc		16
<210> 466 <211> 19 <212> DNA <213> Homo sapiens	<b>S</b>	
<400> 466 catccagatg atgtatggc		19
<210> 467 <211> 17 <212> DNA <213> Homo sapiens		•
<400> 467 cggagcagtt gagagcc		17
<210> 468 <211> 18 <212> DNA <213> Homo sapiens	S	
<400> 468 cggagcagtt gagagcct		18
<210> 469 <211> 18 <212> DNA		

WO 200	5/063985		116 / 752		PCT/JP2004/019763
<213>	Homo sapiens				
<400>	469				
	gcct gagtattg				18
			r	•	
<210><211>		•			
<212>	DNA				
<213>	Homo sapiens			<b>\</b>	
<400>					18
ctgaccg	aga gaacctgg	;			10
<210>	471				
<211>	17				
<212>	DNA Homo sapiens				
<400>	471 ggcc ggttctc				17
Bueceu	9800 9844040				
<210>	472				•
<211>					
<212> <213>	Homo sapiens				
<400>					
	ctgg tgcgtg				16
	•				
<210>					
<211> <212>	18 DNA				
	Homo sapiens				
<400>	473				•
	gtta gtgcggtt				18
<210>					
<211> <212>					
	Homo sapiens				
<400>	474				
	gete tggece				16
.0.4.0	477				
<210> <211>					
	DNA				
	Homo sapiens				
<400>					10
gacacg	gaaa gtgaaggc				18

WO 2005	5/063985	117 / 752	PCT/JP2004/019763
<210> <211> <212> <213>	18		
<400> tcacaga	476 ctc accgagtg	•	18
<210><211><211><212>	17 DNA	,	
<400>	Homo sapiens 477 egt ccagagg		17
<210>			
<211> <212>	18		
<400> ccgtcca	478 gag gatgtatg		18
<210><211><211><212><213>	17		
<400> ggtcgga	479 ctg gcgcttc		17
<210><211><211><212><213>	480 16 DNA Homo sapiens		•
<400> ggcccat	480 gtg gcggag		16
<210> <211> <212> <213>	16		
<400> ggaggg	481 cacg tgcgtg		16
<212>	18		

catgagg	gtt tgcccaag			· ·	18
<210> <211> <212> <213>	18				
<400> cttcatcg	483 ca gtgggcta			\$ \$	18
	17				
	ggg gagacac				17
<210><211><211><211><212><213>	17	·			
	485 acc agtacgc				17
<210> <211> <212> <213>	18				
	486 agt acgcctac				18
<210><211><211><212><213>	487 18 DNA Homo sapiens				
<400>	487 aaa gaggacct		•		18
<210> <211> <212> <213>	488 18 DNA Homo sapiens	•			
	488 gac caccaagc				18
<210> <211> <212>	489 16 DNA				

WO 2005	/063985	119 / 752	PCT/JP2004/019763
<213>	Homo sapiens		
<400> cgtggag	489 tgg ctccgc		16
<210><211><211><212><213>	19	· ·	
<400>			19
<210> <211> <212> <213>	17		
<400> tggaccg	491 cag cggacat		17
<210> <211> <212> <213>	18		
<400> cctgaaa	492 gaa gacctgcg		18
<210><211><211><212><213>	17		
<400> gactggc	493 gat teeteeg		17
<210> <211> <212> <213>	15 DNA		
<400>	494 gtg gggag		15
<210><211><211><212><213>	495 18 DNA Homo sapiens		
<400> ccaggao	495 caca gagetegt		18

ccaggacaca gagetegt

WO 2005/063985	120 / 752	PCT/JP2004/019763
<210> 496 <211> 16 <212> DNA <213> Homo sapiens		
<400> 496 egetteetge gegggt		16
<210> 497 <211> 17 <212> DNA <213> Homo sapiens		
<400> 497 agtgggagac ggcccat		17
<210> 498 <211> 16 <212> DNA <213> Homo sapiens		
<400> 498 ggcccatgag gcggag		16
<210> 499 <211> 17 <212> DNA <213> Homo sapiens		
<400> 499 cggagcagtg gagagcc		17
<210> 500 <211> 18 <212> DNA <213> Homo sapiens		
<400> 500 tctcacaccg tccagatg	·	18
<210> 501 <211> 19 <212> DNA <213> Homo sapiens		
<400> 501 tttctacacc tccgtgtcc		19
<210> 502 <211> 17 <212> DNA <213> Homo sapiens		

<210> 509 <211> 17 <212> DNA

WO 2005	5/063985	122 / 752	PCT/JP2004/019763
<213>	Homo sapiens		
<400> gtcatgge	509 etc ceegaac		17
<210> <211> <212> <213>	19		
<400> agatgat	510 gtt tggctgcga		19
<210><211><211><212><213>	17		
<400>	511 gag ettetae		17
<210><211><211><212><213>	17		
<400> ggcggao	512 caag gcagete		. 17
<212>	513 16 DNA Homo sapiens		
<400> ccgagtg	513 gac ctgggg		16
<210> <211> <212> <213>	18		
<400> ggacat	514 ggcg gctcagat		18
<210> <211> <212> <213>	515 18 DNA Homo sapiens		
<400> tattggg	515 gacg gggagaca		18

WO 2005/063985	123 / 752	PCT/JP2004/019763
<210> 516 <211> 18 <212> DNA <213> Homo sapiens		
<400> 516 gacacggaac gtgaaggc	·	18
<210> 517 <211> 18 <212> DNA <213> Homo sapiens	<b>V</b>	
<400> 517 tacgtggaca acacgcag		18
<210> 518 <211> 18 <212> DNA <213> Homo sapiens		· · · · · · · · · · · · · · · · · · ·
<400> 518 ccaccaagca caagtggg	,	18
<210> 519 <211> 17 <212> DNA <213> Homo sapiens	·.	
<400> 519 agcaggagag tccggag		17
<210> 520 <211> 18 <212> DNA <213> Homo sapiens		
<400> 520 gagacacggc aagtgaag		18
<210> 521 <211> 18 <212> DNA <213> Homo sapiens		
<400> 521 gggctctcag tccatgag	•	18
<210> 522 <211> 16 <212> DNA <213> Homo sapiens		

15

<210> 529 <211> 16 <212> DNA

gcggcccgtg tggcg

WO 2005	5/063985	125 / 752	PCT/JP2004/019763
<213>	Homo sapiens		
<400> ggcccgta	529 gtg gcggag		16
<210> <211> <212> <213>	18	\$	
<400> taccago	530 agt acgcetae		18
<210> <211> <212> <213>	18		
<400> cgcttcat	531 cet cagtggge		18
<210> <211> <212> <213>	18		
<400> gaggaga	532 acag ggaaagtg		18
<210> <211> <212> <213>			
<400> gacaggg	533 gaaa gtgaaggc		18
<210> <211> <212> <213>	534 18 DNA Homo sapiens		
<400> actcaca	534 gag tcaccgag		18
<210> <211> <212> <213>	535 18 DNA Homo sapiens		
<400> ttcacat	535 cca tgtcccgg		18

WO 2005/063985	126 / 752	PCT/JP2004/019763
<210> 536 <211> 18 <212> DNA <213> Homo sapiens		
<400> 536 cgggtatgaa cagcacgc		18
<210> 537 <211> 18 <212> DNA	· · · · · · · · · · · · · · · · · · ·	
<213> Homo sapiens <400> 537 ggaccggaac acacggaa		18
<210> 538 <211> 18 , <212> DNA <213> Homo sapiens		
<400> 538 tctcacaccc tccagatg		18
<210> 539 <211> 17 <212> DNA <213> Homo sapiens		
<400> 539 ctcacaccct ccagagg		17
<210> 540 <211> 18 <212> DNA <213> Homo sapiens		
<400> 540 ccctccagag gatgtatg		18
<210> 541 <211> 15 <212> DNA <213> Homo sapiens		
<400> 541 ggccgcgagg agccc		. 15
<210> 542 <211> 17 <212> DNA <213> Homo sapiens		

WO 2005	5/063985	127 / 752	PCT/JP2004/019763
ccaccag	ttc gcctacg		17
<210> <211> <212> <213>	18		
<400> ctacctgg	543 gat ggcacgtg		18
<210> <211> <212> <213>	17		
<400> ggagcag	544 getg agageet		17
<210> <211> <212> <213>	17		
<400> caggagg	545 ggtc cggagta		17
	18 DNA Homo sapiens		
<400> ctggaga	546 aacc ggaaggag		18
<210> <211> <212> <213>	17		
<400> cctggat	547 sgcc acgtgcg		17
<210> <211> <212> <213>			
<400> cgtggg	548 gtcg gacggg		16
<210> <211> <212>	. 17		

٠.,

WO 2005/063985	128 / 752	PCT/JP2004/019763
<213> Homo sapiens		
<400> 549		
accgcggcag acatggc		17
<210> 550 <211> 15		
<211> 15 <212> DNA		
<213> Homo sapiens	<b>V</b>	
<400> 550		
ccgcgggaag ccccg		15
.010: ##1		
<210> 551 <211> 15		
<211> 15 <212> DNA		
<213> Homo sapiens		
<400> 551 gcggcccgtg aggcg		15
geggeeegig aggeg		10
<210> 552		
<211> 16 <212> DNA		
<212> DNA <213> Homo sapiens		
1210 Homo Sapieno		
<400> 552		
ggcccgtgag gcggag		16
<210> 553		
<211> 18		
<212> DNA		
<213> Homo sapiens		
<400> 553		
cagatcaccg agcgcaag		18
<210> 554		
<210> 004 <211> 16		
<212> DNA		
<213> Homo sapiens		
<400> 554		
gggcgcttac tccgcg		16
555 5 , 5·6		•
<010> 555		
<210> 555 <211> 16		
<211> 10 <212> DNA		
<213> Homo sapiens		
<400> 555		16
ctacctgcag ggccgg		20

WO 2005/063985	129 / 752	PCT/JP2004/019763
<210> 556 <211> 18 <212> DNA <213> Homo sapiens		
<400> 556 attgggacct gcagacac	·	18
<210> 557 <211> 18 <212> DNA <213> Homo sapiens	V	
<400> 557 agatcaccag gcgcaagt		18
<210> 558 <211> 15 <212> DNA <213> Homo sapiens		
<400> 558 gcccgtcggg cggag		15
<210> 559 <211> 18 <212> DNA <213> Homo sapiens		
<400> 559 acagggaaag tgaaggcc		, 18
<210> 560° <211> 18 <212> DNA <213> Homo sapiens		
<400> 560 gaagtgggca getgtggt		18
<210> 561 <211> 17 <212> DNA <213> Homo sapiens		
<400> 561 gtggagagcc tacctgg		17
<210> 562 <211> 19 <212> DNA <213> Homo sapiens		

WO 200	5/063985	130 / 752	PCT/JP2004/019763
tacatcg	cct tgaacgagg		19
<210> <211> <212> <213>	19		
<400> ccatgag	563 gtg tttctccac		19
<210><211><211><212><213>	19		
<400> tactaca	564 acg agagcgagg		19
<210> <211> <212> <213>	17	· ·	
<400> tcgcgct	565 ccg ctactac		17
<210> <211> <212> <213>	17		
<400> gcagag	566 agec tacetgg		17
<210> <211> <212> <213>	567 18 DNA Homo sapiens		
<400> ctaccct	567 gca gagatcac		18
	568 18 DNA Homo sapiens		
<400> ccacca	568 gtat gcctacga		18
<210> <211> <212>	18		

<b>WO 2</b> 005/	063985	131 / 752	PCT/JP2004/019763
<213>	Homo sapiens		
<400> cagatca	569 ccc agegeaag		18
<210> <211> <212> <213>	18		
	570 caa tccatgag		18
<210> <211> <212> <213>	18		
<400> tgtggtg	571 gta ccttctgg	·.	18
<210> <211> <212> <213>	17		
<400> cggagca	572 igtg gagagtc		17
<210><211><211><212><213>	16		
<400> cgtggao	573 etgg eteege		16
<210> <211> <212> <213>	17 DNA		
<400> cttcctcc	574 ac gggtacc		17
<210> <211> <212> <213>	575 16 DNA Homo sapiens		
<400> ggcgga	575 cagg gcggct		16

WO 200	5/063985	132 / 752	. ·	PCT/JP2004/019763
<210> <211> <212> <213>	18			
<400> tcacaga	576 ctc accgagag		·	18
<210> <211> <212> <213>	17		ķ	
<400> gggacga	577 agca gacaggg			17
<210> <211> <212> <213>	16			
<400> ccgaga	578 gage etgegg			16
<210> <211> <212> <213>	19 DNA			
<400> actcaca	579 agat tgaccgaga	·		19
<210> <211> <212> <213>	580 <sup>°</sup> 15 DNA Homo sapiens			
<400> ggagcc	580 gtgg gegee			15
<210> <211> <212> <213>	581 16 DNA Homo sapiens	,		·
<400> gatgga	581 gctg cgggcg			16
<210> <211> <212> <213>		·		

<400> 582 -

WO 2005	5/063985	133 / 752	PCT/JP2004/019763
ctccatga	gc tatttetee		19
<210><211><211><212><213>	583 17 DNA Homo sapiens		·
	583 gga cetteca	<b>V</b>	17
<210> <211> <212> <213>	18		
<400> ccttctgg	584 ac aggagcag		18
<210> <211> <212> <213>	19		
<400> taccage	585 aga acgettaeg		19
<210> <211> <212> <213>	16 DNA Homo sapiens		
<400> ggaggg	586 cctg tgcgtg		16
<211> <212>	17		
<400> gtaccag	587 gegg gaegett		17
<400>	DNA Homo sapiens 588		- <del>-</del>
cgggta	ccag caggacg		17
<210> <211> <212> <213>			

WO 2005/063985	134 / 752	PCT/JP2004/019763
<400> 589 caggacgett acgacgg		17
<210> 590 <211> 17 <212> DNA <213> Homo sapiens		
<400> 590 gtgcggttgg acagcga		17
<210> 591 <211> 18 <212> DNA <213> Homo sapiens <400> 591 gaggacggta ctcacacc		18
<210> 592 <211> 16 <212> DNA <213> Homo sapiens		
<400> 592 tggctgccac gtgggg		16
<210> 593 <211> 15 <212> DNA <213> Homo sapiens	·	
<400> 593 ccgcgggcac cgtgg	·	15
<210> 594 <211> 18 <212> DNA <213> Homo sapiens		
<400> 594 cagacacggc atgtgaag		18
<210> 595 <211> 16 <212> DNA <213> Homo sapiens		
<400> 595 ggcccgttgg gcggag		16

<210> 596

WO 2005/063985	135 / 752	PCT/JP2004/019763
<211> 15 <212> DNA <213> Homo sapiens		
<400> 596 ggcccgtcgg gcgga	•	15
<210> 597 <211> 17 <212> DNA <213> Homo sapiens	<b>V</b>	
<400> 597 tggacgacge geagtte		17
<210> 598 <211> 19 <212> DNA <213> Homo sapiens	·	
<400> 598 cagataatgc atggctgcg		19
<210> 599 <211> 17 <212> DNA <213> Homo sapiens		
<400> 599 gagggtetec ccaagec		17
<210> 600 <211> 19 <212> DNA <213> Homo sapiens		·
<400> 600 aggtatttca ccacatccg	·	19
<210> 601 <211> 18 <212> DNA <213> Homo sapiens		
<400> 601 atgtgaaggg ccactcac		18
<210> 602 <211> 18 <212> DNA <213> Homo sapiens		
<400> 602 cacggagctt gtggagac		18

<211> <212>	603 15 DNA Homo sapiens			,
	603 etc etecg		, ·	15
<210> <211>	604 17			
<212>	DNA Homo sapiens			
<400>	604 acg tgcgtgg			17
664,686	avb 1616166			
<210> <211> <212>	605 16 DNA			
<212> <213>				
	605 lgg acgcat			16
<210>	606			
<211>	17			
<212> <213>				
<400>	606	~		
ctgagct	cct ggaccgc			17
<210>	607			
<211>	17			
<212>	DNA			
<213>	Homo sapiens		•	
<400> gatagas	gegg gagggge			17
-010-	000			
<210><211>				
<211><212>	17 DNA			
	Homo sapiens			
<400>				17
ccgtgga	itgg agcagga			11
<210>	609			
<211>	16			
<212>				
<213>	Homo sapiens			

WO 2005/063985	137 / 752	PCT/JP2004/019763
<400> 609 cacggacgcc cccaag		16
<210> 610 <211> 17 <212> DNA <213> Homo sapiens		
<400> 610 agtgggcgtc tgtggtg	A.	17
<210> 611 <211> 18 <212> DNA <213> Homo sapiens		
<400> 611 ccccaagacg catatgac		18
<210> 612 <211> 16 <212> DNA <213> Homo sapiens <400> 612		10
gcaggagagg ccggag		16
<210> 613 <211> 19 <212> DNA <213> Homo sapiens		
<400> 613 gattacatet ccctgaacg		19
<210> 614 <211> 17 <212> DNA <213> Homo sapiens		
<400> 614 tccgcagaca cctggag		17
<210> 615 <211> 17 <212> DNA <213> Homo sapiens	·	-
<400> 615 gaagtgggtg gctgtgg		17
<210> 616 <211> 19		

WO 200	5/063985	138 / 752	<u>.</u> 2 .	PCT/JP2004/019763
<212> <213>	DNA Homo sapiens			
<400> tttctaca	616 act teegtgtee			19
<210> <211>				
<212> <213>	DNA Homo sapiens		<b>,</b>	
<400> acacctc	617 cat gtcccgg			17
<210> <211>				
<212>				
<400> ccggcag	618 gcac gcctac	•		16
<210> <211>	19			
<212> <213>	DNA Homo sapiens			
<400> tattggg	619 acg aggagacac			19
<210> <211> <212> <213>	16			
<400>	620 cett gtggeg			16
<210> <211> <212> <213>	16	·		
<400> ccggca	621 ggtc gcctac			16 .
<210><211><211><212><213>	17			
<400>				17

WO 2005/063985		139 / 752	PCT/JP2004/019763
<211> <212> <213>			
<400> gaccetge	623 cac ggctact		17
<210><211><211><212><212><213>	19	· · · · · · · · · · · · · · · · · · ·	
<400> ccatcca	624 gag gatgtatgg		19
<210> <211> <212>	16 DNA		•
<400>	Homo sapiens 625 agg gcgggc		16
<210><211><211><212>	17		
<213> <400>	Homo sapiens		17
<210> <211> <212>	16 ·		
<213><400> ggaccts	_		16
<210><211><211><212><213>	18		
<400> cactcac	628 cagg ctgaccga		18
<210> <211> <212> <213>	16		
<400>	629 cagt gtggcg		16

<213> Homo sapiens

<210>	630				
<211>	15				
<211>	DNA				
				•	
<213>	Homo sapiens				
. 4005	000				
<400>	630				15
gtgtcccc	gc ccggc			<b>,</b>	15
				7	
<210>	631				•
<211>	16	•			
<212>	DNA				
<213>	Homo sapiens				
	•				
<400>	631				
	ag cccctc				16
6					
<210>	632				
<211>	21				
	DNA				
<213>	Homo sapiens				
	222	•			
<400>	632				0.1
cccatctc	ag ggtgaggggc t				21
				•	
<210>	633				
<211>	20				
<212>	DNA				
<213>	Homo sapiens				
<400>	633				
	age gteteettee				20
Boboneo	age greatestice				
<210>	634				
	23				
	DNA				
<213>	Homo sapiens				
	004				
<400>					0.0
gcccagg	tct gggtcagggc cag				23
<210>	635				
<211>	18				
<212>	DNA				
<213>	Homo sapiens		•		
	<b>1</b>				
<400>	635				
	ccc gaaccete				18
a ve e c i c	oos Barrosso				_
<210>	636				
<211>	18				
	DNA				
~ / · · / · /	171873				

WO 2005/063985

141 / 752

PCT/JP2004/019763

<400> 636

atggcgcccc gaaccctc

18

<210> 637

<211> 19 <212> DNA <213> Homo sapiens

<400> 637

catctcaggg tgaggggct

19

## SEQUENCE LISTING B

<110>	CANON KABUSHI KAISHA	
<120>	Probe set and method for identifying HLA allele	
<130>	ff	
<150> <151>		
<160>	1015	
<170>	PatentIn version 3.2	
<210><211><211><212><212><213>	1 19 DNA Homo sapiens	
<400> aggtatt	1 tet acaceteeg	19
<210><211><211><212><212><213>	DNA	
<400> ctcacac	2 cct ccagage	17
<210><211><211><212><212><213>	15 DNA	
<210><211><211><212>	ccg cgggc 4 17	15
<400>		17
<210><211><211><212><213>	16	
<400> gtgagg	5 cgga gcagcg	16
<210> <211>		

WO 2005	5/063985		143 / 752		PCT/JP2004/019763
<212> <213>	DNA Homo sapiens				
<400>	6				
	gag cagcgg				16
0 00 0	3 0 0 00			•	•
<210>					
<211>					
<212>				Ļ	
<b>\213</b> /	Homo sapiens				
<400>	7				
gcctacct	gg agggcga				17
<010×	O				
<210> <211>					
<211>					
	Homo sapiens				<b>~</b>
	8				
ggcgagt	gcg tggagtg			Ÿ	17
<210>	0	•			
<211>		,			
<211>					
	Homo sapiens				
<400>					
cgggaag	ggac aagctgg				17
<210>	10<211> 16				
<212>					
<213>	Homo sapiens			•	
<400>					
ggagtgg	ctc cgcagg				16
<210>	11				
<211>					
<212>	DNA				
	Homo sapiens				
<400>					
gctacgt	gga cgacacg				17
<210>	12				
	20<212> DNA	•			
<213>	Homo sapiens				
<400>					00
acagato	tac aagaccaaca				. 20
<210>	13				
<211>					
<212>					
	Homo sapiens				
	. <del>-</del>				

WO 2005/063985		144 / 752	PCT/JP2004/019	
<400>				
gtgaggo	gga gcaggac		17	
<210>				
<211>				
<212>				
<213>	Homo sapiens			
<400>		<b>,</b>		
cctcctcc	ge gggcata		17	
<210>	15			
<210> <211>				
<211>				
<400>	15			
	ca gtccacca		18	
<210>				
<211>	17			
<212>				
<213>	Homo sapiens			
<400>	16			
	cct ccagagg		17	
		·		
<210>				
<211>				
<212>				
<213>	Homo sapiens			
<400>				
accggaa	acac acagatett		19	
•	.,			
<210>	18			
<211>	20			
<212>				
<213>	Homo sapiens	•		
<400>	18			
acagato	ette aagaccaaca		20	
<210>	19			
<211>	17			
<212>				
<213>	Homo sapiens			
<400>	19			
cgcggg	eatg accagtc		17	
40.1.05				
<210>	20			
<211> <212>	18 DNA			
<213>	Homo sapiens			
-210/	Homo sapiems			

WO 2005	5/063985	145 / 752	PCT/JP2004/019763
<400> cggaaca	20 lea cagatetg		18
<210> <211> <212> <213>	19		
<400> cacagao	21 etga ccgagagaa	, .	19
<210> <211> <212> <213>	17		•
<210><211><211><212>	tet cacatca 23 20 DNA		17
<400>	Homo sapiens 23 cca gaggatgtat		20
<210> <211> <212> <213>	18		
<400> ggatgta	24 tgg ctgcgacc		18
<210><211><211><212><213>	16		•
<400> ctgcgac	25 ctg gggccc	·	16
<210><211><211><212><213>	19		
<400> agacaca	26 agaa gtacaagcg		19
<210> <211> <212> <213>	17		

WO 2005	5/063985	146 / 752			PCT/JP2004/01976	3
<400>	27					
	cag gcacagg				17	
	28					
	17					
<212>						
<213>	Homo sapiens					
<400>	28		,			
gcacagg	getg accgagt				. 17	
					·	
<210>	29					
	17					
<212>						
<213>	Homo sapiens					
<400>	29					
gaggccg	ggt ctcacat				17	
<210>	30					
<211>						
<212>						
<213>	Homo sapiens	·				
<400>	30					
	atc atccagagg				19	
8						
<210>	31					
<210> <211>						
<211>						
	Homo sapiens					
-4005	0.1					
<400>	31				16	
<210>	tee gegggt 32				. 16	
<211>						
<212>					,	
	Homo sapiens			•		
<400>	32					
	ccag gcacagg		÷		17	
Саавьск	cong gonougg					
.010-	0.0					
<210> <211>						
<211>						
	Homo sapiens					
-210	Troute suprems					
<400>	33				·	
caagac	caac acacagactt				20	
<210>	34					
<211>						
<212>	DNA					
<213>	Homo sapiens					

WO 2005/063985	147 / 752	PCT/JP2004/019763
<400> 34 cgcgggtatg accagtc		17
<210> 35 <211> 17 <212> DNA		
<213> Homo sapiens		,
<400> 35 gcctacctgg agggcac		17
<210> 36 <211> 18 <212> DNA <213> Homo sapiens		
<400> 36 ctggagaacg ggaaggag <210> 37 <211> 16		18
<212> DNA <213> Homo sapiens		
<400> 37 gacgetggag egegeg		16
<210> 38 <211> 17 <212> DNA <213> Homo sapiens		
<400> 38 gcctacctgg agggcct		17
<210> 39 <211> 17 <212> DNA <213> Homo sapiens		
<400> 39 ggcctgtgcg tggagtc		17
<210> 40 <211> 15 <212> DNA <213> Homo sapiens		
<400> 40 cggccgcggg gagct		15
<210> 41 <211> 16 <212> DNA <213> Homo sapiens		

WO 2005/06	3985	148 / 752		PCT/JP2004/019763
<400> 41 tcctggaccg	ccgcga			16
<210> 42 <211> 16 <212> DN <213> Ho				
<400> 42 cggaacctgc			,	16
<210> 43 <211> 16 <212> DN <213> Ho				
<400> 43 gcctacctgg				16
<210> 44 <211> 16 <212> D1 <213> Ho				
<400> 44				16
<210> 45 <211> 17 <212> Di <213> Ho <400> 45 gtgtggcgga	NA omo sapiens			17
<400> 46				17
<210> 47 <211> 18 <212> D1 <213> He	e e			
<400> 47				18
<210> 48 <211> 18 <212> D				· · · · · · · · · · · · · · · · · · ·

<b>WO 2005</b>	5/063985	149 / 752	PCT/JP2004/019763
<213>	Homo sapiens		
<400> cacagao	48 tta ccgagagg		18
<210> <211> <212> <213>	16		<b>S</b>
<400> ctgcgga	49 ccc tgctcc		16
<210><211><211><212><213>	17		
<400> ccgcggg	50 tat gaccagg		17
<210><211><211><212><213>	19		
<400> cactcca	51 tga ggtatttcg		19
<210><211><211><211><212><213>	18		
<400> ggtattte	52 ega cacegeca		18
<210> <211> <212> <213>	53 16 DNA Homo sapiens		
<400> cgagaga	53 agga geegee		16
<210><211><211><212>	17 DNA		
<400>	Homo sapiens 54 ctg gagggca		17

WO 2005/0639	985	150 / 752	PCT/JP2004/019763
<211> 19			
<212> DNA	A		
<213> Hon	no sapiens	,	
<400> 55	,		
gatgtgtagg a	ggaagagc		19
<210> 56			
<211> 16			,
<212> DNA	4		
<213> Hon			
<400> 56			
ctgcgcaccg ca	getee		16
<210> 57			
<211> 18	٠		
<212> DNA	A		
<213> Hon			
<400> 57			
ccgagagaac	et.gcggat		18
ooguguguuo	, , , , , , , , , , , , , , , , , , ,		10
<210> 58			
<211> 17			
<212> DNA	A		
<213> Hon			
<400> 58			
gagaacctgc g	gatege		17
<i>5</i> 5			
<210> 59			
<211> 16			
<212> DNA			•
<213> Hon	no sapiens		
<400> 59			. 10
ctgcggatcg c	getee	·	16
<210> 60			
<211> 16			
<212> DNA	A		
<213> Hon	no sapiens		
<400> 60			
cacgctggag c	gcgcg	· .	16
<210> 61		•	
<210> 61 <211> 17			
<211> 17 <212> DNA	Δ		
<213> Hon			
<400> 61			
ggaccggaac a	acacaac		17

<210>	62			•	
<211>	19				
	DNA				
<213>	Homo sapiens			• .	
. 2102	monitor sapiens				
<400>	62				
					. 10
cacttgg	ag acgatgtat				19
				4	
<210>	63				
<211>	17				
<212>	DNA				
<213>	Homo sapiens				
<400>	63			•	
	tgg gaccggg				17
SSASTAT	69 Pacc PPP				1,
z010s	CA.				
<210>	64				
<211>	18				
<212>					
<213>	Homo sapiens				
<400>	64				
	aca cagatett				18
CCEEEac	aca cagaicii				10
-010-	0.5				
<210>	65				
<211>	17				
<212>					
<213>	Homo sapiens				
					•
<400>	65				
	egg agcaget	•			17
~6~6~66	288 mBamBaa				_,
<210>	66				
<211>	16				
<212>	DNA				
<213>	Homo sapiens				
					•
<400>	66				
	acc accagg				16
-6-666					
<210>	67		•		
<211>	18				
<212>	DNA				
<213>	Homo sapiens				
		•			
<400>	67				
	act gaccgagt				18
	<i>G</i>				
<210>	68				
<211>	19				•
<212>	DNA				
<213>	Homo sapiens				

WO 2005	5/063985	152 / 752		PCT/JP2004/019763
<400> ttcaaga	68 cca acacacagg		•	19
<210> <211> <212> <213>	18			
<400> ccgggag	69 raca cagatete		<b>,</b>	18
<210> <211> <212> <213>	16			
<400> gtgctgg	70 gcc ctgggc			16
<210> <211> <212> <213>	18			
<400> ggctcag	71 atc acccaget			18
<400>	18 DNA Homo sapiens			18
<210><211><211><212><213>	18			
<400>	73 ata accagtta			18
<210><211><211><212><212><213>	18			
<400>				18
<210> <211> <212>	18			

WO 2005/063985	153 / 752	PCT/JP2004/019763
<213> Homo sapiens		
<400> 75 tgggagccat cttcccaa		18
<210> 76 <211> 17 <212> DNA <213> Homo sapiens	У.	
<400> 76 gagcagctga gagcctg		17
<210> 77 <211> 17 <212> DNA <213> Homo sapiens		
<400> 77 ggtctcacac cctccat		17
<210> 78 <211> 17 <212> DNA <213> Homo sapiens		
<400> 78 ccagaccagc aggagac		17
<210> 79 <211> 17 <212> DNA <213> Homo sapiens		
<400> 79 ccctgagatg ggagcca		17
<210> 80 <211> 20 <212> DNA <213> Homo sapiens		
<400> 80 catgaggtat ttctacaccg		20
<210> 81 <211> 17 <212> DNA <213> Homo sapiens		
<400> 81 ctcccactcc atgagge		17

WO 2005	5/063985	154 / 752	1 h	PCT/JP2004/019763
<211> <212> <213>				
<400> gcaggag	82 gggg ccggaa			16
<210><211><211><212><212><213>	17		\$	
<400> ggagtgg	83 gete egcagae			17
<210> <211> <212> <213>	16			
<400> gacgctg	84 cag cgcgcg			16
<210> <211> <212> <213>	19			
<400> caccete	85 cag aggatgtat			19
<210> <211> <212> <213>	17		·	
<400> tcctgctg	86 get eteggga			17
<210><211><211><212><213>	15			
<400> gcgcccc	87 ggg cgcca			15
<210> <211> <212> <213>	18			
<400> gagtatt	88 ggg accgggag			18

<210>	89					
<211>	17					
<212>	DNA					
	Homo sapiens			•		
	•					
<400>	89					
	gcg gagcagt					17
6-66	6-6 666-			<b>5</b>		
<210>	90					
<211>						
<212>						
	Homo sapiens					
<400>	90					
			*			18
gaccaaa	ctc aggacacc					10
<210>	91					
<211>						
<211>						
	Homo sapiens					
<b>\</b> 213>	nomo sapiens					
<400>	91					
	ega eggeaaa					17
8	900					
<210>	92					
<211>	16					
<212>						
	Homo sapiens					
					ů.	
<400>	92					
	tgg accgcg					16
0 0	,					
<210>	<b>9</b> 3				•	
<211>	19					
<212>	DNA					
	Homo sapiens					
<400>	93					
ggattac	atc gccctgaat					19
<210>	94		•			
<211>	17					
<212>	DNA					
<213>	Homo sapiens					
		•				
<400>	94					
cgacacg	cag ttcgtgc	·				17
<210>	95					
<211>	19					
	DNA					
<213>	Homo sapiens					

WO 2005/063985	156 / 752	PCT/JP2004/019763
<400> 95 cagateteca agaceaaca		19
<210> 96 <211> 17 <212> DNA <213> Homo sapiens		
<400> 96 cggagctgtg gtcgcta		17
<210> 97 <211> 18 <212> DNA <213> Homo sapiens		
<400> 97 caccetccag aggatgtt		18
<210> 98 <211> 18 <212> DNA <213> Homo sapiens		
<400> 98 tacgcctacg acggcaaa		18
<210> 99 <211> 19 <212> DNA <213> Homo sapiens		
<400> 99 cagatetgea agaceaaca		19
<210> 100 <211> 17 <212> DNA <213> Homo sapiens		
<400> 100 cgagtccgag gatggct		17
<210> 101 <211> 16 <212> DNA <213> Homo sapiens	· .	
<400> 101 gggcctgtgc gtggac		16
<210> 102 <211> 16		

WO 2005	5/063985	157 / 752	PCT/JP2004/019763
<212> <213>	DNA Homo sapiens		
<400> gggccgg	102 gete ceaett		16
<210> <211> <212>	17 DNA	<b>Y</b>	
<400>	Homo sapiens 103 agge eteegeg		17
<210><211><211><212><212>	17 DNA		
<400>	Homo sapiens 104 tgg tggtgct		17
<210><211><211><212><213>	16		
<400> gtgaccc	105 асс асссед		16
<210><211><211><212><213>	18		
<400> gtattgg	106 gac cgggagat		18
<210> <211> <212> <213>	17		
<400> gcgagto	107 ccga ggatggc	·	17
<210><211><211><212><213>	18 DNA		•
<400>	108 cag aggatgtc		18

<211> 18 <212> DNA <213> Homo sapiens <400> 115 ccctgaacga ggacctga

					*	_	
<210>	116						
<211>	17						
<212>	DNA						
<213>					•		
~210~	Homo sapiens						
<400>	116						
ggagece	cgc ttcatcg						17
88-8	-8				<b>\</b>		
					·		
						-	
<210>	117						
<211>	19						
	DNA						
<213>	Homo sapiens						
<400>	117						
aggtatti	tet acacegeca						19
	g						
<210>	118						
<211>	16						
	DNA						
<213>	Homo sapiens						
<400>	118						
	atg gcgccc						16
iccga55	are ececc						10
					*		
<210>	119						
<211>	17						
	DNA		,				
			•				
<213>	Homo sapiens						
<400>	119						
							17
gittgata	agc gacgcca						1,
	•					•	
<210>	120						
<211>	15						
<212>	DNA			•			
<213>	Homo sapiens	•					
<400>	120						
							15
gageege	ggg cgcca						19
<210>	121						
<211>	17						
<212>							
<213>	Homo sapiens	•					
	-						
<400>	121						
							1 /**
ggcggag	gcag ctgagaa						17
	•						
<210>	122						
<211>	17						
<212>	DNA					•	
<213>	Homo sapiens						

WO 2005/063985	160 / 752	PCT/JP2004/019763
<400> 122 aacctacctg gagggcc	•	17
<210> 123 <211> 17 <212> DNA <213> Homo sapiens	·	
<400> 123 acctacctgg agggeet	v	17
<210> 124 <211> 18 <212> DNA <213> Homo sapiens <400> 124		10
ctccaagacc aacacacg		18
<210> 125 <211> 18 <212> DNA <213> Homo sapiens		
<400> 125 ctacgtggac gacacgct		18
<210> 126 <211> 18 <212> DNA <213> Homo sapiens		
<400> 126 ccgggagaca cagatett		18
<210> 127 <211> 19 <212> DNA <213> Homo sapiens		
<400> 127 acacacagac ttaccgagt		19
<210> 128 <211> 19 <212> DNA <213> Homo sapiens		
<400> 128 cacagactta ccgagtgaa		19
<210> 129 <211> 18		

WO 200	5/063985	161 / 752	PCT/JP2004/019763
<212> <213>	DNA Homo sapiens		
<400> ccgcggg	129 cat aaccagtt		18
<210><211><211><212>	18		
	Homo sapiens		
<400> cccagtte	130 cgt gaggttca		18
	18 DNA Homo sapiens		,
<400> ccgggag	131 gaca cagatetg		18
<210><211><211><212><213>	18		
<400> ggctcag	132 gate acceagea		18
<210> <211> <212> <213>	17		
	133 tgg agggcac		17
<210> <211> <212> <213>	19		
<400> cactcca	134 tga ggtatttcc		19
<210><211><211><212><212><213>	DNA		
<400>	135 caa agacacat	•	18

WO 2005/063985	162 / 752	PCT/JP2004/019763
<210> 136 <211> 20 <212> DNA <213> Homo sapiens		
<400> 136 gagacacaga tetecaagat		20
<210> 137 <211> 15 <212> DNA <213> Homo sapiens	· · · · · · · · · · · · · · · · · · ·	
<400> 137 gggaggcggc ccgtc		15
<210> 138 <211> 18 <212> DNA <213> Homo sapiens		
<400> 138 gcgccgtgga tagagcaa	•	18
<210> 139 <211> 20 <212> DNA <213> Homo sapiens		-
<400> 139 gaccaacaca cagacttaca		20
<210> 140 <211> 20 <212> DNA <213> Homo sapiens		
<400> 140 acacceteca gaatatgtat		20
<210> 141 <211> 17 <212> DNA <213> Homo sapiens		
<400> 141 ggagccccgc ttcattg		17
<210> 142 <211> 19 <212> DNA <213> Homo sapiens		
<400> 142 ggattacatc gccctgaag		19

WO 2005	5/063985	163 / 752	PCT/JP2004/019763
<210><211><211><212>	18		•
<213>	Homo sapiens		
<400>		•	10
caccete	cag aggatgtg		18
<210>		\$	
<211>			
<212> <213>	Homo sapiens		
<400>	144		
	gga tagagcaa		18
<b>-010</b> >	1.45		
<210> <211>			
<211>			
	Homo sapiens		•
<400>	145		
cgagaga	aacc tgcgcac		17
40.105	1.40		
<210> <211>			_
<211><212>			
	Homo sapiens		
<400>	146		
gagaac	ctgc gcaccgc		17
ر د010×	1.47		
<210> <211>	147 . 19		
<211>		·	
<213>	Homo sapiens		
<400>	147		
gtctcac	acc ctccagaat		19
<210>	148		
<210> <211>	146 16		•
<212>			
<213>	Homo sapiens		
<400>	148	•	
caggag	gggc cggagc		16
۰ ۵۱۸۰	140		
<210> <211>	149 17		
<211>	DNA		
<213>	Homo sapiens		
	-	•	

<400> 149

W.O. 2007/052007		- DCT-(170-00-1/0-10-7-0
WO 2005/063985	164 / 752	PCT/JP2004/019763
ctgggcttct accetgg		17
<210> 150		
<211> 18	.~	
<212> DNA <213> Homo sapier	as .	
<400> 150		-0
cacagactga ccgagagg	,	18
<210> 151		
<211> 16 <212> DNA		•
<213> Homo sapier	as	
<400> 151		10
cgccgcggac acggca		16
<210> 152		
<211> 16		
<212> DNA <213> Homo sapier	S	
<400> 152	·	
ctgctctggg gggcag		16
<210> 153		
<210> 155 <211> 16		
<212> DNA		
<213> Homo sapier	ns ·	
<400> 153		16
ccagagcgag gccggt		10
<210> 154		
<211> 16 <212> DNA		
<213> Homo sapier	as	
<400> 154		10
ctccgtgtcc cggcct	*.	16
<210> 155		·
<211> 16 <212> DNA		
<212> DNA <213> Homo sapier	ns	
<400> 155		10
cgcgggtacc accagc		16

<210> 156 <211> 17 <212> DNA

WO 2005	/063985	165 / 752	<i>2</i>	PCT/JP2004/019763
<213>	Homo sapiens			
<400> tgaccga	156 gac ctgggct			17
<210><211><211><212><213>	17		,	
<400> caggagg	157 ggc cggagtt			17
<210> <211> <212> <213>	17			
<400> cgagaga	158 agec tgeggae			17
<210> <211> <212> <213>	17			
<400> cacggcg	159 gct cagatet			17
<210> <211> <212> <213>	160 17 DNA Homo sapiens			
<400> cggagca	160 get gagaget			17
<210><211><211><212><213>	15			
<400> ggcccga	161 cgg gcgct			15
<210><211><211><212><213>	17			
<400>	162 catg accagtt			17

WO 200	5/063985	166 / 752	P.	PCT/JP2004/019763
<210> <211> <212> <213>	16			
	163 ccg gcccgt		•	16
<210> <211> <212> <213>	16		. 5	
<400> gaccgcg	164 gcg gacacc			16
<210> <211> <212> <213>	16			
<400> ctgcgac	165 gtg gggccc			16
<210> <211> <212> <213>	16			
<400> tccgagg	166 gacg gagece			16
<210><211><211><212><213><400>	15 DNA Homo sapiens			
	eggg egeca			15
<210> <211> <212> <213>	16			
<400> ccgcgag	168 gtcc gaggac			16
<210> <211> <212> <213>				
	169 atcc agaggatgtt			20

<210><211><211><212><213>	170 19 DNA Homo sapiens			•	
				•	
	170				19
cacagac	tta ccgagagaa			•	13
				, <b>S</b>	
<210>	171				
	17				
<212>					
<213>	Homo sapiens				
<400>	171				
catgtace	gc tgcgacc				17
<210>	179				
	17				
<212>					
<213>	Homo sapiens				
	172				17
ctgcgga	acc tgcgcga				17
				•	
<210>	173				
<211>					
<212>					
<213>	Homo sapiens				
<400>	173				
catgacca	agt cegeetg		•		17
<210>	174				
<211>	18				
<212>	DNA				
<213>	Homo sapiens				
<400>	174				
	ag aggatgtc				18
Castato					
0.7.0	4 PM PM				
<210>	175				
<211> <212>	18 DNA				
	Homo sapiens				
1210-	nomo suprems	•			
<400>	175				
gacctga	gct cctggaca				18
<210>	176				
<211>	17				
	DNA		•		
<213>	Homo sapiens				•

WO 2005/063985	168 / 752	PCT/JP2004/019763
<400> 176 cgagagagcc tgcgcac		17
<210> 177 <211> 15 <212> DNA <213> Homo sapiens		•
<400> 177 gcaggagggg ccggg		15
<210> 178 <211> 18 <212> DNA <213> Homo sapiens		
<400> 178 gaacctacct ggagggca	•	18
<210> 179 <211> 18 <212> DNA <213> Homo sapiens		
<400> 179 aacctacctg gagggcat		18
<210> 180 <211> 16 <212> DNA <213> Homo sapiens		·
<400> 180 ctggaccgcg gcggag		16
<210> 181 <211> 17 <212> DNA <213> Homo sapiens		
<400> 181 tagagcagga ggggcca		17
<210> 182 <211> 18 <212> DNA <213> Homo sapiens		
<400> 182 tctcacactt ggcagacg		18
<210> 183 <211> 17		

WO 200	5/063985	1	69 / 752		PCT/JP2004/019763
<212> <213>	DNA Homo sapiens				•
<400> ggcgga	183 gcag cggagaa				17
<210><211><211><212><213>	15			V	
<400>	184 gec gegga				15
<400>	17 DNA Homo sapiens		•		17
<210><211><211><212><213>	19				
<400> ccgcggg	186 gtat aaccagtta				19
<210><211><211><212><213><400>	17 DNA Homo sapiens				
	gcag tggagaa 188				17
<210> <211> <212> <213>	18 DNA				
<400> gaatat	188 tggg accgggag	·	·		18
<210> <211> <212> <213>					
<400> gcggct	189 caga tcacccg				17

WO 2005/063985		170 / 752	PCT/JP2004/019763
<211> <212>	190 17 DNA Homo sapiens		
	190 cc agagcac	·	17
<212>	191 16 DNA Homo sapiens		
<400> agtggga	191 ggc ggccct	,	16
<210><211><211><212><212>			
<400>			16
<212>	17		
<400>			17
<210><211><211><212><213>	194 18 DNA Homo sapiens		
<400>			18
<210><211><211><212><213>	16		
<400>			16
<210><211><211><212><213>			
<400>			17

<210>	197					
<211>	16					
<212>						
	Homo sapiens			•		
~210~	mondo sapiens					•
<400>	197					
	gg accgcg					16
Poporoci	PP MOOPOR			<b>i</b> ,		10
•						
<210>	198		•			
<211>						
<212>						
<213>	Homo sapiens					
<400>	100				•	
<400>	198					17
agggcga	igtg cgtggat					11
	•		•			
<210>	100					
<211>						
<212>						
<213>	Homo sapiens					
-400-	100					
<400>	199					10
ggtattto	ca caccgcca	•				18
-010-	000		-			
<210>	200					
<211>						
<212>			•			
<213>	Homo sapiens					
	200			•		1.7
ccgcggg	cat aaccaga					17
-010-	001					
<210>						
<211>						
	DNA					
<213>	Homo sapiens					
<400>						
ccggagt	att gggaccc					17
	•					
<210>	202					
<211>	18					
<212>	DNA					
<213>	Homo sapiens	•				
	•					
<400>	202					
ggtctca	cat catccagg					18
<210>	203					
<211>	17					
	DNA	•				
<213>	Homo sapiens	r				
~210~	mond sapiens					

WO 2005/063985	172 / 752	PCT/JP2004/019763
<400> 203 cgcctacgac ggcaaga		17
<210> 204 <211> 17 <212> DNA <213> Homo sapiens		·
<400> 204 cgcgggcata accagtc		17
<210> 205 <211> 17 <212> DNA <213> Homo sapiens		
<400> 205 ccgggtctca cacttgg		17
<210> 206 <211> 19 <212> DNA <213> Homo sapiens		
<400> 206 cacttggcag aggatgtat		19
<210> 207 <211> 17 <212> DNA <213> Homo sapiens		
<400> 207 gagagagcct gcggaag		. 17
<210> 208 <211> 17 <212> DNA <213> Homo sapiens		
<400> 208 cgggaaggac acgctgc		17
<210> 209 <211> 16 <212> DNA <213> Homo sapiens		
<400> 209 cacgctgcag cgcgcg		16
<210> 210 <211> 19		

WO 2005	5/063985	173 / 752	PC	CT/JP2004/019763
<212> <213>	DNA Homo sapiens	·		
<400> ccatctct	210 ga ccatgaggt			19
<210><211><211><212><213>	18		<b>y</b>	
<400> cgggaga	211 acac agateteg			18
<210><211><211><212><213>	16 DNA Homo sapiens			
<400> ggaggcg	212 ggcc cgtgtc			16
<210><211><211><212><213>	17			
<400> agagaa	213 cetg egeaceg			17
<210><211><211><212><213>	17			
<400>	214 eccg etteatt		,	17
<210><211><211><212><213>	16 DNA			
<400> ctgcgca	215 ccc cgctcc			16
<210> <211> <212> <213>				
<400> ggccgga	216 agta ttgggag			17

WO 2005/063985	174 / 752	PCT/JP2004/019763
<210> 217 <211> 17 <212> DNA <213> Homo sapiens		
<400> 217 ccgcgggcat aaccagg		17
<210> 218 <211> 17 <212> DNA <213> Homo sapiens	v.	
<400> 218 ggcgagtgcg tggagtc		17
<210> 219 <211> 15 <212> DNA <213> Homo sapiens		
<400> 219 cgggcgccgt gggtg		15
<210> 220 <211> 18 <212> DNA <213> Homo sapiens		
<400> 220 gagagaacct geggateg		18
<210> 221 <211> 18 <212> DNA <213> Homo sapiens <400> 221 gtggacgaca cgctgttg		18
<210> 222 <211> 16 <212> DNA <213> Homo sapiens		
<400> 222 tggagggcct gtgcgc		16
<210> 223 <211> 19 <212> DNA <213> Homo sapiens	·	
<400> 223 gacggcaagg attacatca	•	19

<210><211><211><212><213>	224 18 DNA Homo sapiens					
	224					
ccgcggg	tat aaccagtt				<b>'</b>	18
-	·					
<210>	225				*	
<211>	17					
<212> <213>	DNA					
<b>~213</b> /	Homo sapiens					
<400>						
ctccgcgg	gt ataaccg	•				17
<210>	226					
<211>	17					
<212>	DNA					
<213>	Homo sapiens					
<400>	226					
gcggagc	agg acagagt	•				17
<210>	227					•
	19					
	DNA					
<213>	Homo sapiens					
<400>	227					
gagacac	aga agtacaagc					19
	•					
<210>	228					
<211>	17					
<212>	DNA					
<213>	Homo sapiens					
<400>						
cgccagg	cac agactgg					17
<210>	229					
<211>	17					
	DNA			•		
<213>	Homo sapiens					
<400>	229					
tgtggtcg	get getgtgg					17
<210>	230		•			
<211>	17					
<212>	DNA					
<213>	Homo sapiens					

WO 2005/063985	176 / 752	PCT/JP2004/019763
<400> 230 cctgcggaac ctgctcc		17
<210> 231 <211> 19 <212> DNA <213> Homo sapiens		
<400> 231 agaacettee agaagtgga		19
<210> 232 <211> 17 <212> DNA <213> Homo sapiens		
<400> 232 agccccgctt catctcc		17
<210> 233 <211> 19 <212> DNA <213> Homo sapiens		
<400> 233 ccgcgggtat aaccagtta		19
<210> 234 <211> 16 <212> DNA <213> Homo sapiens		
<400> 234 ggcctgtgcg tggagg		16
<210> 235 <211> 16 <212> DNA <213> Homo sapiens		
<400> 235 cggatcgcgc tccgcg		16
<210> 236 <211> 18 <212> DNA <213> Homo sapiens		
<400> 236 ttcgcctacg acggcaaa		18
<210> 237 <211> 18		-

WO 2005/063985	177 / 752	PCT/JP2004/019763
<212> DNA <213> Homo sapiens		
<400> 237 ctcctccgcg ggcataaa		18
<210> 238 <211> 16		
<211> 10 <212> DNA <213> Homo sapiens	¥.	
<400> 238 gegteteete egeggt		16
<210> 239		
<211> 15 <212> DNA <213> Homo sapiens		
<400> 239 cgggcgcetc etccc		15
<210> 240 <211> 17		
<212> DNA <213> Homo sapiens		
<400> 240 gagtccgagg acggaga		17
<210> 241 <211> 17		
<212> DNA <213> Homo sapiens		
<400> 241 atagagcagg aggggcg		17
<210> 242 <211> 18		•
<212> DNA <213> Homo sapiens		
<400> 242 ccagaccagc aggagatg		18
<210> 243 <211> 17	•	
<212> DNA <213> Homo sapiens		
<400> 243 cagcatgagg ggctgct		17

WO 2005	5/063985	178 / 752		PCT/JP2004/019763
<210> <211> <212> <213>	19		·	
<400> cagactta	244 acc gagagaact		•	19
<210> <211> <212> <213>	16		ÿ	
<400> gcgacgc	245 cgc gagtca			16
<210> <211> <212> <213>	15			
	246 gag ccccc			15
	17 DNA Homo sapiens			
<400> cgagaga	247 agcc tgcggat			17
<400>	Homo sapiens			17
<210><211><211><212><213>				
<400> ggcacag	249 gact gaccgagt			18
<210> <211> <212> <213>	DNA			
	250 egeg gacace			16

<210>	251			
<211>				
	15			
<212>	DNA		•	
<213>	Homo sapiens			
-100s	051			
	251			
gcaggag	ggg ccggc	•		15
			<b>y</b>	
<210>	252			
<211>	16			
<212>	DNA			
<213>	Homo sapiens			
	aromo oupromo		•	
~100×	050			
<400>				
ccgcgag	tcc gagagg			16
	Ÿ.			
<210>	959			
<211>	19			
<212>	DNA			
<213>	Homo sapiens			
-210-	months suprome			
. 400	0.50			
<400>				
ggtctcac	cac ttggcagat		•	19
	30 0			
-010	054			
<210>				
<211>	16			
<212>	DNA			
<213>	Homo sapiens			
~210~	monio sapiens		•	
	~ ·			
<400>	254		•	
acggcac	ccc gaaccc			16
00				
0.4.0	~~~			
<210>				
<211>	17			
<212>	DNA			
	Homo sapiens			
~210~	monio sapiens			
<400>				
ctcctcct	gc tgctctg			17
	0 0			
0.4.0	0 <b>=</b> 0			
<210>	256			
<211>	19			
<212>	DNA			
	Homo sapiens	•		
<b>\213</b> /	Homo sapiens			
		•		
<400>	256			
agacaca	igaa gtacaaggg			19
	55			
	A			
<210>	257			
<211>	19			
	DNA			
<213>	Homo sapiens			

WO 2005/063985	180 / 752	PCT/JP2004/019763
<400> 257 ggtctcacat catccaggt		19
<210> 258 <211> 17 <212> DNA <213> Homo sapiens		
<400> 258 gcgggcatga ccagtct		. 17
<210> 259 <211> 16 <212> DNA <213> Homo sapiens		
<400> 259 gaccgcggcg gacaca		16
<210> 260 <211> 17 <212> DNA <213> Homo sapiens		
<400> 260 gccggagtat tgggacg		17
<210> 261 <211> 17 <212> DNA <213> Homo sapiens		
<400> 261 cctcctccgc gggtata		17
<210> 262 <211> 18 <212> DNA <213> Homo sapiens		
<400> 262 cacggcggct cagatcat		18
<210> 263 <211> 16 <212> DNA <213> Homo sapiens		. •
<400> 263 tgcggatcgc gctccc		16
<210> 264 <211> 18		

WO 200	5/063985	181 / 752		PCT/JP2004/019763
<212> <213>	DNA Homo sapiens			
<400> gccggag	264 gtat tgggacga			18
<210><211><211><212><212><213>	15		¥	
<400>				15
<210><211><211><212>	16			
<400>	Homo sapiens 266 gcg agtcca			16
<210><211><211><212><213>	18			
<400> gtcaccg	267 tag ctgtggtc			18
<210><211><211><212><213>	19 DNA			
<400> gtgtagg				19
<210><211><211><212><213>	18 DNA		•	
<400> cagago	269 ctac ctggagga			18
<210> <211> <212> <213>				
<400> gtcatcg	270 ggag ctgtggtt			18

WO 2005	5/063985	182 / 752	PCT/JP2004/019763
<210> <211> <212> <213>	16		
<400> cacctccg	271 gtg tcccgg	•	16
<210> <211> <212>	18 DNA	•	
<400>	Homo sapiens 272 agc atgtacgg		18
<210><211><211><212>	16		
<213> <400>	Homo sapiens		16
<210> <211> <212>	18		
<213> <400>	Homo sapiens		18
<210> <211>	275		
<400>	Homo sapiens		. 16
<210><211><211><212>	17		
<213> <400>	Homo sapiens 276		17
<210>			17
<211><212><213>			
<400> ggaggg	277 cgag tgcgtg		16

<210>	278				
<211>	16				
<212>	DNA				
			•	•	
<213>	Homo sapiens				
	-				
<400>	278				
					10
cgiggag	tgg ctccgc				16
				<b>y</b>	
<210>	279				
<211>	17				
<212>	DNA				
<213>	Homo sapiens				
44005	050				
<400>	279				
acaaget	gga gcgcgct				17
aoaagot	PP~ P~P~P~				- •
	•				
.010	000				
<210>	280				
<211>	17				
<212>	DNA				
<213>	Homo sapiens				
~410~	Homo sapiens			•	
<400>	280				
ctccgcas	gt acctgga	•			17
	38				
	•				
<210>	281				
<211>	18				
<212>					
<213>	Homo sapiens				
<400>	281				
					10
ggacgac	acg cagttcgt				18
<210>	282				
<211>	19				
<212>	DNA				
<213>	Homo sapiens				
-400s	000				
<400>	282				
aagacca	aca cacagactg				19
-010-	000				
<210>	283				
<211>	18				
<212>					
<213>	Homo sapiens	•			
-210-	rromo sapiens				
		•			
<400>	283				
ggagcag	gac agagccta				18
<210>	284				
<211>	18				
<212>					
<213>	Homo sapiens				

WO 2005	5/063985	184	4 / 752	P	CT/JP2004/019763
<400>	284 ata accagtac		-		18
<210><211><211><212><212><213>	18				
<400> cagtcca	285 cca tccccatc			y	18
<210><211><211><212><213>	18				
<400>	286 agg atgtacgg				18
<210><211><211><212><213>	20				
<400> acacaga	287 atct tcaagaccaa				20
<210> <211> <212> <213>	17	·		·	
<400> tgaccag	288 tcc gcctacg				17
<210><211><211><212><213>	18				
<400> cacaga	289 tetg caaggeec				18
<210><211><211><212><213>	17				
	290 gaac ctgcgga				17
<210><211><211><212><213>	19				

WO 2005/063985	185 / 752	PCT/JP2004/019763
<400> 291 tetcacatca tecagagga		19
<210> 292 <211> 18 <212> DNA <213> Homo sapiens		
<400> 292 gaggatgtat ggctgcga		18
<210> 293 <211> 16 <212> DNA <213> Homo sapiens		
<400> 293 ctgcgacctg gggccc		16
<210> 294 <211> 15 <212> DNA <213> Homo sapiens		
<400> 294 ctggggcccg acggg		15
<210> 295 <211> 17 <212> DNA <213> Homo sapiens		
<400> 295 gtacaagege caggeac		17
<210> 296 <211> 17 <212> DNA <213> Homo sapiens		
<213> Homo sapiens <400> 296 aggcacaggc tgaccga		17
<210> 297 <211> 17 <212> DNA <213> Homo sapiens		

17

<400> 297

tgaccgagtg agcctgc

WO 2005	5/063985	186 / 752	PCT/JP2004/019763
<211>			
<212>		·	
<213>	Homo sapiens		
<400>	298		
ggtctca	cat catccagag		19
<210>	299	•	
<211>			•
<212> <213>			
<b>\210</b> >	nomo sapiens	•	
<400>		•	•
catccag	agg atgtacgg		18
			•
<210>			
<211>			
<212>			
<213>	Homo sapiens		
<400>	300		
tccgcgg	gta tgaccag		17
<210>	301		
<211>			
<212>			
	Homo sapiens		
<400>	301		90
aagacca	aca cacagactta		20
<210>			
<211> <212>			
	Homo sapiens		
	•		
<400>			
acacaga	actt accgagaga		19
<210>			
<211>	16		
<212> <213>	DNA Homo sapiens		
<b>\210</b> >	nomo sapiens		
<400>	303		
ggaggg	cacg tgcgtg		16
<210>			
<211>			
<212> <213>	Homo sapiens		
<400>	304		15
gggaag	gaga cgctgga		17
<210>			
<211>	17		

WO 2005/063985	187 / 752	PCT/JP2004/019763
<212> DNA <213> Homo sapiens		
<400> 305 gaaggagacg ctggagc	,	17
<210> 306 <211> 16 <212> DNA <213> Homo sapiens		\$ 
<400> 306 ggagggcctg tgcgtg		16
<210> 307 <211> 16 <212> DNA <213> Homo sapiens <400> 307 cgtggagtcg ctccgc		16
<210> 308 <211> 16 <212> DNA <213> Homo sapiens		
<400> 308 cggggagete egette		16
<210> 309 <211> 16 <212> DNA <213> Homo sapiens		
<400> 309 cgccgcgaac acggcg		16
<210> 310 <211> 17 <212> DNA <213> Homo sapiens		
<400> 310 tgcgcggcca ctacaac		17
<210> 311 <211> 16 <212> DNA <213> Homo sapiens		
<400> 311 ggagggcctg tgcgtg		16

WO 2005/063985	188 / 752	PCT/JP2004/019763
<210> 312 <211> 16 <212> DNA <213> Homo sapiens		
<400> 312 ggcccgtgtg gcggag		16
<210> 313 <211> 17 <212> DNA <213> Homo sapiens		• • • • • • • • • • • • • • • • • • •
<400> 313 ggagcagetg agageet		17
<210> 314 <211> 19 <212> DNA <213> Homo sapiens		
<400> 314 cacagatete caagaceaa		19
<210> 315 <211> 19 <212> DNA <213> Homo sapiens		
<400> 315 acacagactt accgagagg		19
<210> 316 <211> 16 <212> DNA <213> Homo sapiens <400> 316 ccgagaggac ctgcgg		16
<210> 317 <211> 17 <212> DNA <213> Homo sapiens		
<400> 317 ccctgctccg ctactac		17
<210> 318 <211> 18 <212> DNA <213> Homo sapiens		,
<400> 318 tatgaccagg acgcctac		18

			*	
<210>	210			
<211>	18			
<212>	DNA			
<b>&lt;213&gt;</b>	Homo sapiens			
<400>	319			
				10
aggiaiii	cg acaccgcc			18
		<b>,</b>		
<210>	320			
<211>				
<212>	DNA			
	Homo sapiens			
~210>	monitor sapiens			
<400>	320			
caccecca	itg tcccgg			16
•	•			
<210>	321			
<211>	15			
<212>				
<213>	Homo sapiens			
	•			
<400>	291			
				4 P
gagccgc	cgg cgccg			15
		•		
<210>	399			
	16			
<212>	DNA			
	Homo sapiens			
~210~	monio sapiens			
<400>	322			
ggaggg	acg tgcgtg			16
88 888		·		
c010>	202			
<210>				
<211>	18			
<212>	DNA			
<213>	Homo sapiens			
<400>	323			
	gage teaggtgg			18
Pappaas	ago roughbab			
<210>	324			
<211>	17			
<212>		,		
<213>	Homo sapiens			
	•			
<400>	394			
				1.5
ccgcgctc	cg ctactac			17
<210>	325			
		,		
<211>	16		•	
<212>	DNA			
~410/	Homo sapiens			

WO 2005/063985	190 / 752	PCT/JP2004/019763
<400> 325 cctgcggatc gcgctc		16
<210> 326 <211> 16 <212> DNA <213> Homo sapiens		
<400> 326 gcggatcgcg ctccgc		16
<210> 327 <211> 17 <212> DNA <213> Homo sapiens		
<400> 327 tcgcgctccg ctactac		17
<210> 328 <211> 17 <212> DNA <213> Homo sapiens <400> 328 gaaggacacg ctggagc		17
<210> 329 <211> 19 <212> DNA <213> Homo sapiens		·
<400> 329 acacacagac cttcaagac		19
<210> 330 <211> 18 <212> DNA <213> Homo sapiens		
<400> 330 gacgatgtat ggctgcga		18
<210> 331 <211> 17 <212> DNA <213> Homo sapiens		
<400> 331 gggaccggga cacacag		17
<210> 332 <211> 17		

WO 2005	5/063985	191 / 752	PCT/JP2004/019763
<212> <213>	DNA Homo sapiens		
<400> accacca	332 gga cgcctac		17
<210> <211> <212> <213>	18	У	
<400> aacacac	333 cagg ctgaccga		18
<400>	17 DNA Homo sapiens		17
<210><211><211><212><213>	17		
<400> cacccag	335 ctc aagtggg		17
<210><211><211><212><213>	336 19 DNA Homo sapiens		
<400> cttggca	336 gac gatgtatgg		19
<210><211><211><212><213>	19		
<400> taaccag	337 tta gcctacgac	·	19
<210><211><211><212><213>	DNA		
<400> ctgcgac	338 ectg gggccg		16

<b>WO 2</b> 005	/063985	192 / 752	PCT/JP2004/019763
<210> <211> <212> <213>	19		
<400>	339 aa tecacegte		19
<210><211><211><212><213>	17	,	
<400> gagage	etge etggagg		17
<210> <211> <212>	19 DNA		•
<213>	Homo sapiens		
<400> acceteca	341 agt ggatgtatg		19
<210><211><211><212><213>	19	·	
<400> agcagga	342 agac agaacette		19
<400>	343 18 DNA Homo sapiens 343 gcca tcttccca		18
<210><211><211><212><213>	17		
<400>			17
<210> <211> <212> <213>	345 20 DNA Homo sapiens		
<400>	345		90

20

tccatgaggc atttctacac

cggagcagtg gagagcc

-0.10-		
<210>	346	
<211>	18	
<212>	DNA	
<213>	Homo sapiens	
44005	246	
<400>	346	
ggggccg	gaa tattggga	18
-		
0.10		
<210>	347	
<211>	17	
<212>		
<213>	Homo sapiens	
<400>	347	
		17
iccgcaga	aca cctggag	11
<210>	348	
<211>	16	
<212>	DNA	
<213>	Homo sapiens	
~210>	Tiomo sapiens	
400	0.40	
<400>	348	
gacgctg	cag cgcgcg	16
666		
<210>	349	
<211>	16	
<212>		
<213>	Homo sapiens	
<400>	3/19	
	•	10
	gag ccctgg	16
<210>	350	
<211>		
<212>	DNA	
<213>	Homo sapiens	
- 4005	0.50	
<400>		
cgggcgc	ecat ggataga	17
∠010 <u>&gt;</u>	251	
<210>		
<211>	18	
<212>	DNA	
<213>	Homo sapiens	
<400>	351	
	ggag acacagat	18
SEACCES	56a6 acacagat	
<210>	352	
<211>		
<212>		
<213>	Homo sapiens	
	•	
<400>	: 359	
		17
cggagca	agtg gagagcc	T 1

WO 2005/063985	194 / 752	PCT/JP2004/019763
<210> 353 <211> 18 <212> DNA <213> Homo sapiens	S	
<400> 353 tcaggacacc gagcttgt		18
<210> 354 <211> 19 <212> DNA <213> Homo sapiens	, S	
<400> 354 cgacggcaaa gattacatc		19
<210> 355 <211> 16 <212> DNA <213> Homo sapiens		
<400> 355 tggaccgcgg cggaca		16
<210> 356 <211> 18 <212> DNA <213> Homo sapiens	·	
<400> 356 cgccctgaat gaggacct		18
<210> 357 <211> 18 <212> DNA <213> Homo sapiens	·	
<400> 357 cagttcgtgc ggttcgac		18
<210> 358 <211> 18 <212> DNA <213> Homo sapiens		
<400> 358 gtggtcgcta ctgtgatg		18
<210> 359 <211> 18 <212> DNA <213> Homo sapiens		
<400> 359 agaggatgtt tggctgcg	,	18

<210> 360

<211>	19		
<212>	DNA	•	
<213>	Homo sapiens		
<400>	360		
	ctg caagaccaa		10
cacagai	cig caagaccaa	٧	19
-010s	0.01		
<210>	361		
<211>			
<212>			
<213>	Homo sapiens		
<400>	361		
aggatgg	ctc cccggg		16
<210>	362		
<211>	16		
<212>			
		•	
<b>\</b> 213>	Homo sapiens		
44005	0.00		
<400>	362		
tgcgtgg	acg ggctcc		16
<210>	· <b>36</b> 3		
<211>	18		
<212>	DNA		
<213>	Homo sapiens		-
<400>	363		
	ett catgaggt		18
golocca	ou caugaggi		10
	•		
<010×	004		
<210>	364		
	17		_
	DNA		•
<213>	Homo sapiens		
<400>	364		
gcctccgc	egc agactta		17
<210>	365		
<211>	18		
<212>	DNA		
<213>	Homo sapiens	•	
72102	Homo sapiens	ь.	
Z100>	265		
<400>			• •
rggrggt	get ttetggag	•	18
<210>	366		
<211>	17		
<212>	DNA		
<213>	Homo sapiens		
	T		

WO 2005/063985	196 / 752	PCT/JP2004/019763
<400> 366 accaccccgt ctctgac		17
<210> 367 <211> 19 <212> DNA <213> Homo sapiens		·
<400> 367 accgggagat acagatete		, 19
<210> 368 <211> 16 <212> DNA <213> Homo sapiens <400> 368		
gaggatggcg ccccgg		16
<210> 369 <211> 17 <212> DNA <213> Homo sapiens		
<400> 369 gaggatgtet ggetgeg		17
<210> 370 <211> 16 <212> DNA <213> Homo sapiens		
<400> 370 cgcggacaag gcggct		16
<210> 371 <211> 18 <212> DNA <213> Homo sapiens		
<400> 371 ccctccagac gatgtacg		18
<210> 372 <211> 18 <212> DNA <213> Homo sapiens		
<400> 372 cctccagacg atgtacgg		18
<210> 373 <211> 16		

<b>WO 2005</b> /	063985	197 / 752	PCT/JP2004/019763
<212> <213>	DNA Homo sapiens		
<400> aacctgc	373 gca cegege		16
<210><211><211><212><212>	17	У	
<400>			17
<400>	17 DNA Homo sapiens 375		
getteate	gc agtgggc		17
<210><211><211><212><213>	15		
<400> atggcgc	376 ccc gggcg		15
<400> cgacgcc	377 acg agtccg		16
<210><211><211><212><213>	18		
<400> cagctga	378 gaa cctacctg		18
<210> <211> <212> <213>	18		
	379 acg gacttacc		18

WO 2005/063985	198 / 752	PCT/JP2004/019763
<210> 380 <211> 17 <212> DNA <213> Homo sapiens		
<400> 380 gggaaggaga cgctgca	• •	17
<210> 381 <211> 18 <212> DNA <213> Homo sapiens	,	
<400> 381 acgacacget gttcgtga		18
<210> 382 <211> 18 <212> DNA <213> Homo sapiens		
<400> 382 cttaccgagt gaacctgc		18
<210> 383 <211> 17 <212> DNA <213> Homo sapiens		
<400> 383 ccgagtgaac ctgcgga		17
<210> 384 <211> 19 <212> DNA <213> Homo sapiens		
<400> 384 ataaccagtt cgcctacga		19
<210> 385 <211> 18 <212> DNA <213> Homo sapiens		
<400> 385 gtgaggttca acagcgac		18
<210> 386 <211> 17 <212> DNA <213> Homo sapiens		
<400> 386 cacccagcac aagtggg		17

<210>	387		
	18		
<212>		,	
			•
<213>	Homo sapiens		
•			
<400>	387		
cggagca	iget gagaacet		18
	.8 88		,
/			•
-0105	000		
<210>	388		•
	19		
<212>	DNA		
<213>	Homo sapiens		
<400>	200		
			10
aggtatt	tcc acacctccg		19
<210>	389		•
<211>			
<212>			
<213>	Homo sapiens		
<400>	389	•	
aaagaca	acat gtgacccac		19
0	0 0		
-010>	200		
<210>			
<211>			
<212>	DNA		
<213>	Homo sapiens		
	•		
<400>	390		
			20
ateteca	aga tcaacacaca		20
<210>	391		
<211>	16		
<212>	DNA		
	Homo sapiens		
~210~	1101110 Sapiens		
<100s	001		
	391		
ggcccgt	cag gcggag		16
<210>	392		
<211>	18		
<211>			
<213>	Homo sapiens		
<400>	392		
	gcaa gaggggcc		18
9~-~6~!	ooobo		10
.010	000		
<210>	393		
<211>	19		
<212>	DNA		
<213>			-
_ ~ ~	apiciis	•	

WO 2005/063985	200 / 752	PCT/JP2004/019763
<400> 393 cagacttaca gagagagcc		19
<210> 394		
<211> 19 <212> DNA		
<213> Homo sapiens		,
<400> 394	\$	
gaatatgtat ggctgcgac		19
		,
<210> 395		
<211> 18 <212> DNA		
<213> Homo sapiens		
<400> 395		
cgcttcattg cagtgggc		18
212 222		
<210> 396 <211> 17		
<211> 17 <212> DNA		
<213> Homo sapiens		
<400> 396		
gccctgaagg aggacet		17
<210> 397		
<210> 397 <211> 18		
<212> DNA		
<213> Homo sapiens		
<400> 397		
cttaccgagt gagcctgc		18
c010> 200		
<210> 398 <211> 17		
<212> DNA		
<213> Homo sapiens		
<400> 398		
gaggatgtgc ggctgcg		17
<210> 399		
<210> 333 <211> 18		
<212> DNA		
<213> Homo sapiens		
<400> 399		
gatagagcaa gaggggcc		18
<210> 400		
<210> 400 <211> 18		•
<del>-</del>		,

WO 2005	/063985	201 / 752	PCT/JP2004/019763
<212> <213>	DNA Homo sapiens		
<400> cacagat	400 ctg caaggcca		. 18
<210><211><211><212><212>	16 DNA		v
<400>	Homo sapiens 401 acc gcgctc		16
<400>	15 DNA Homo sapiens		15
<210><211><211><212><213>	19		
<400> cctccag	403 aat atgtatggc		19
<210><211><211><212><213>	17		
<400> ggccgga	404 gca ttgggac		17
<210><211><211><212><213>	18		
<400> tctaccct	405 gg ggagatca		18
<210><211><211><212><213>	406 18 DNA Homo sapiens		
<400> ggacaca	406 ggca gctcagat		18

WO 2005/063985	202 / 752	PCT/JP2004/019763
<210> 407 <211> 16 <212> DNA <213> Homo sapiens		
<400> 407 gggggcagtg gccctg		16
<210> 408 <211> 17 <212> DNA <213> Homo sapiens		
<400> 408 gaggccggtt ctcacac		17
<210> 409 <211> 15 <212> DNA <213> Homo sapiens		
<400> 409 teceggeetg geege		15
<210> 410 <211> 17 <212> DNA <213> Homo sapiens		
<400> 410 accaccagca cgcctac		17
<210> 411 <211> 16 <212> DNA <213> Homo sapiens		
<400> 411 acctgggetg getece		16
<210> 412 <211> 16 <212> DNA <213> Homo sapiens		
<400> 412 ggtcacggag ccccga		16
<210> 413 <211> 17 <212> DNA <213> Homo sapiens		

<400> 413

WO 2005	063985	203 / 752	PCT/JP2004/019763
gccggag	ttt tgggacc		17
<210><211><211><212><213>	19		
<400> cctccaga	414 aat atgtacggc	· ·	19
<210><211><211><212><213>	16		
<400> cctgcgg	415 acc etgete		16
<210> <211> <212> <213>	17	•	
<400> ctcagate	416 etc ccagege		17
<400>	18 DNA Homo sapiens 417		
gctgaga	gct tacctgga		18
<210><211><211><212><213>	418 15 DNA Homo sapiens		
<400> cgggcgt	418 tcc tccgc		15
<210><211><211><212><213>	419 18 DNA Homo sapiens		
<400> atgacca	419 gtt cgcctacg		18
<210><211><211><212>	420 18 DNA	•	

VO 2005/0	63985	204 / 752	PCT/JP2004/019763
<213>	Homo sapiens		
<400> cgcgggc	420 ata accagttc		18
-010	491		
<210><211>			·
<212>	DNA	<b>,</b>	
<213>	Homo sapiens	,	
<400>	421		
cggcccg	tcc gcggg	•	15
<210>	422		
<211>	16	•	
<212>			
<213>	Homo sapiens		
<400>			16
gcggaca	ecg cggctc		10
<210>	423		
<211>			•
<212>			
<213>	Homo sapiens	·	
<400>			10
tctcacat	tca tecagagea		19
<210>	424		
<211>			
	DNA		
<213>	Homo sapiens		
<400>			15
grgggg	eccg acggg		10
<210>	425		
<211>			
<212>			
<213>	Homo sapiens		
<400>			15
acggag	cccc gggcg		15
<210>	426		
<211>	16		
<212>			
<213>	Homo sapiens		
<400>			16
tccgagg	gacg gagece		10

WO 2005/063985	205 / 752	PCT/JP2004/019763
<210> 427 <211> 18 <212> DNA <213> Homo sapiens		
<400> 427 acctgcgcga ctactaca		18
<210> 428 <211> 16 <212> DNA		y
<213> Homo sapiens <400> 428	•	
gtccgcctgc gacggc		16
<210> 429 <211> 16 <212> DNA <213> Homo sapiens		
<400> 429 tcctggacag cggcgg		16
<210> 430 <211> 17 <212> DNA <213> Homo sapiens	,	
<400> 430 ccgagagaac ctgcgca		17
<210> 431 <211> 17 <212> DNA		
<213> Homo sapiens <400> 431 ggggccggga tattggg		17
<210> 432 <211> 17 <212> DNA <213> Homo sapiens		
<400> 432 tggagggcat gtgcgtg		17
<210> 433 <211> 17 <212> DNA <213> Homo sapiens		

<400> 433

WO 2005/063985	206 / 752	PCT/JP2004/019763
ggagggcatg tgcgtgg		17
<210> 434 <211> 15 <212> DNA <213> Homo sapiens		
<400> 434 gcggcggaga ccgcg		15
<210> 435 <211> 18 <212> DNA <213> Homo sapiens		
<400> 435 ggaggggcca gaatattg		18
<210> 436 <211> 18 <212> DNA <213> Homo sapiens		
<400> 436 cttggcagac gatgtacg		18
<210> 437 <211> 18 <212> DNA <213> Homo sapiens		
<400> 437 ttggcagacg atgtacgg		18
<210> 438 <211> 18 <212> DNA <213> Homo sapiens		
<400> 438 cagcggagaa cctacctg		18
<210> 439 <211> 15 <212> DNA <213> Homo sapiens		
<400> 439 ggccgcggag agccc		15
<210> 440 <211> 18 <212> DNA		

<b>WO 2</b> 005/	063985	207 / 752	PCT/JP2004/019763
<213>	Homo sapiens		
<400>	440 ac aggatgta		.18
		•	
<210> <211>	17		
<212> <213>	DNA Homo sapiens	,	
<400>			17
cggagca	gtg gagaacc		17
<210><211>		•	
<212>	DNA		
<213>	Homo sapiens		
<400>	442 gaa cctacctg		18
046984	.baa ootaoog		~
<210>			
<211> <212>			
	Homo sapiens	•	
<400>			
gatcacc	cgg cgcaagt		17
<210>	444		
<211>			
<212> <213>	DNA Homo sapiens		
<400>	444		
ccagago	acg tacgget		17
<210>	445		
<211>	16		
<212>			
	Homo sapiens	•	
	445 ectt gtggeg		16
99-99	פיססיס		
<210>			
<211>			
<212> <213>	Homo sapiens		
<400>	446		
acctggg	cgg gctccc		16

WO 2005/063985	208 / 752	PCT/JP2004/01976
<210> 447 <211> 17 <212> DNA <213> Homo sapiens		
<400> 447 gtcacggcac cccgaac		. 17
<210> 448 <211> 18 <212> DNA <213> Homo sapiens		
<400> 448 aggtatttcc acaccgcc		18
<210> 449 <211> 17 <212> DNA <213> Homo sapiens		
<400> 449 gtccgaggaa ggagccg		17
<210> 450 <211> 17 <212> DNA <213> Homo sapiens <400> 450		
gcgcaagttg gaggcgg		17
<210> 451 <211> 16 <212> DNA <213> Homo sapiens		•
<400> 451 acctgggetg geteec		16
<210> 452 <211> 17 <212> DNA <213> Homo sapiens		
<400> 452 tgcgtggatt ggctccg		17
<210> 453 <211> 19 <212> DNA <213> Homo sapiens		

<400> 453

WO 2005	5/063985	209 / 752	PCT/JP2004/019763
cataaco	eaga acgeetaeg		19
<210><211><211><212><213>	17		
<400> ttgggad	454 ccg gagacac	·	17
<210> <211> <212> <213>	20		·
<400> atcatcc	455 agg tgatgtatgg		20
<210><211><211><212><213>	19		
<400> gacggca	456 aga attacateg		19
<210> <211> <212> <213>	18		
<400> ataacca	457 gtc cgcctacg		18
<210><211><211><212><213>	16		
<400> ctgcgga	458 agc tgcgcg		16
<210> <211> <212> <213>	19		
<400> tcacactt	459 gg cagaggatg		19
<210> <211> <212> <213>	16		

WO 2005/063985	210 / 752	PCT/JP2004/019763
<400> 460 cacgctgcag cgcgc	g	16
<210> 461 <211> 18 <212> DNA		•
<213> Homo sa <400> 461 accatgaggt caccc		18
<210> 462 <211> 19		
<212> DNA <213> Homo sa <400> 462	apiens	
acagateteg aagae	caac	19
<211> 16 <212> DNA <213> Homo sa	apiens	
<400> 463 gecegtgteg eggag	С	16
<210> 464 <211> 15 <212> DNA		
<213> Homo sa <400> 464 gcgcaccgcg ctccg	ipiens	15
<210> 465 <211> 18		
<212> DNA <213> Homo sa <400> 465	apiens	
cegetteatt geagtg	gg	18
<210> 466		

<211> 16 <212> DNA <213> Homo sapiens <400> 466 cetgegeace cegete

16

WO 2005/063985	211 / 752		PCT/JP2004/019763
<211> 17 <212> DNA <213> Homo sapiens			
<400> 467 ccccgctccg ctactac		• .	17
<210> 468 <211> 18 <212> DNA <213> Homo sapiens		,	
<400> 468 gtattgggag cgggagac			18
<210> 469 <211> 17 <212> DNA <213> Homo sapiens			
<400> 469 gcgggcataa ccaggac			17
<210> 470 <211> 18 <212> DNA <213> Homo sapiens			
<400> 470 cataaccagg acgectac			18
<210> 471 <211> 18 <212> DNA <213> Homo sapiens			·
<400> 471 ctccgcgggt ataaccag			18
<210> 472 <211> 16 <212> DNA <213> Homo sapiens			
<400> 472 ccgtgggtgg agcagg			16
<210> 473 <211> 16 <212> DNA <213> Homo sapiens			
<400> 473 gcggatcgcg ctccgc			16

<210> <211>	18					
<212> <213>	DNA Homo sapiens			•		
<400>	_					
	ttg gtgaggtt					18
				<b>,</b>		
-010-	455					
<210> <211>						
<211>						
	Homo sapiens					
				,		
<400>						16
ccrgrgc	gcg gagtcg					10
<210>						
<211><212>						
	Homo sapiens					
-210-	riomo sapione					
<400>						
gattaca	tca ccctgaacg				*	19
<210>	477					
<211>						
<212>						
<213>	Homo sapiens					
<400>	477					
ggtataa	ccg gttagccta					19
	•					
<210>	478				•	
<211>		•		-		
<212>						
<213>	Homo sapiens					
<400>	478					
	gagt ctacctgg			•	•	18
			•			
<210>	479					
<211>						
<212>						
	Homo sapiens					
<b>4400</b> 5	450					
<400>						18
aagtaca	agc gccaggca					10
<210>						
<211>						
<212>	DNA Homo sapiens					
~410/	rromo sapiens	•	2			

<400> cacagac	480 stgg ccgagtga	. 18
<212>	481 18 DNA Homo sapiens	,
<400> gctgctgt	481 tgg tgtgtagg	18
<210> <211> <212> <213>	482 18 DNA Homo sapiens	
	482 tec getactac	18
	483 tgga cagctgtg	18
	484 15 DNA Homo sapiens	
<400> cagcgcg	484 gegg accec	15
<210> <211> <212> <213>	18	
<400> cttcatct	485 ccc gtgggcta	18
<210> <211> <212> <213>	16	
<400> cgtggag	486 gggg ctccgc	16

WO 2005/063985	214 / 752	PCT/JP2004/019763
<211> 17 <212> DNA <213> Homo sapiens		
<400> 487 cgctccgcga ctacaac		17
<210> 488 <211> 18 <212> DNA <213> Homo sapiens	,	
<400> 488 cgggcataaa cagtacgc		18
<210> 489 <211> 18 <212> DNA <213> Homo sapiens		
<400> 489 cctccgcggt tataacca		18
<210> 490 <211> 16 <212> DNA <213> Homo sapiens		
<400> 490 cctcctcccc gggcat		16
<210> 491 <211> 16 <212> DNA <213> Homo sapiens		
<400> 491 gacggagacc cgggcg		16
<210> 492 <211> 17 <212> DNA <213> Homo sapiens		
<400> 492 ggaggggcgg gagtatt	· ·	17
<210> 493 <211> 18 <212> DNA <213> Homo sapiens		
<400> 493 gcaggagatg gaacette		18

<210>	494	
<211>	16	
	DNA	
		· ·
<213>	Homo sapiens	
	494	
ggggctg	ctg aagccc	16
		<b>,</b>
<210>	495	
	15	
<212>		
<213>	Homo sapiens	
•		`
<400>	495	·
cgggtca	cgg cgccc	15
-000	00 0	
	,	v.
~010×	40 <i>C</i>	
<210>		
<211>	16	
<212>		
<213>	Homo sapiens	
	•	
<400>	496	
		16
iccgagg	acg gagccg	10
		•
<210>		
<211>	18	·
<212>	DNA	
	Homo sapiens	
210	zzomo oupromo	
<400>	497	
		18
cgagaga	act tgcggatc	. 10
	•	
		•
<210>	498	
<211>	17	
<212>	DNA	
~210~	Homo sapiens	·
	400	•
<400>		1.7
cgcgagt	cag aggacgg	17
		•
<210>	499	
<211>	17	
<212>	DNA	
<213>	Homo sapiens	
		•
<400>	499	
ggagcco	eccc ttcatcg	17
55 5	3	
<210>	500	
<211>	16	
<212>	DNA	•
<213>	Homo sapiens	

	•	
<400>	500	
		10
ggggcc	ggcg tattgg	16
	•	
<210>	E01	
<211>	16	
<212>	DNA	
	Homo sapiens	
<b>\</b> 213/	Homo sapiens	
<400>	501	
	aggg gagccg	16
iccgaga	1666 646CC6	10
<210>	502	
	19	
<212>		
<213>	Homo sapiens	
<400>	502	
	•	7.0
cttggca	gat gatgtatgg	19
.010	<b>K</b> 00	
<210>		
<211>	17	
<212>		
<213>	Homo sapiens	
<400>	503	
		17
gtacaa	gggc caggcac	11
	•	
	·	*
<210>	504	
<211>	19	
<212>	DNA	
<213>	Homo sapiens	
\ <u>D</u> 10>	Homo suprems	
<400>	504	
teateca	ggt gatgtatgg	19
	765 6-1-6-1-1-66	
<210>	505	
<211>		
	DNA	
<213>	Homo sapiens	
<400>	505	
		10
tgacca	gtct gcctacga	18
-010:	FOC	
<210>		
<211>	16	
	DNA	
<b>~213</b> >	Homo sapiens	
<400>	506	
		16
goggad	acag cggctc	10

WO 2005/063985	217 / 752	PCT/JP2004/019763
<211> 18 <212> DNA <213> Homo sapiens		
<400> 507 tattgggacg gggagaca		18
<210> 508 <211> 18	V	
<212> DNA <213> Homo sapiens		
<400> 508 cgcgggtata accagtac		18
<210> 509 <211> 18		
<212> DNA <213> Homo sapiens		
<400> 509 ctcagatcat ccagcgca		18
<210> 510 <211> 17 <212> DNA		
<213> Homo sapiens		
<400> 510 cgcgetcccc tactaca		17
<210> 511 <211> 18. <212> DNA		
<213> Homo sapiens		
<400> 511 attgggacga ggagacac		18
<210> 512 <211> 15 <212> DNA		
<213> Homo sapiens		
<400> 512 gcccgtgcgg cggag		15
<210> 513 <211> 17		
<212> DNA <213> Homo sapiens		
<400> 513 gaaggagacg ctgcagc		17

<210><211><211><212><213>	514 17 DNA Homo sapiens	A		
<400>	514			•
gcgagtc	caa gagggga		<b>,</b>	17
<210>				
<211>	17			
<212>				
<213>	Homo sapiens			
<400>				
gctgtgg	tcg ctgtggt			17
	,			
<210>				
<211> <212>	17 DNA			
<212><213>	DNA Homo sapiens			
~210~	Homo sapiens			
<400>	516			
cctggag	gac ctgtgcg			17
<210>	517			
<211>	19			
<212>				
<213>	Homo sapiens			
<400>	517			
agctgtg	gtt gctactgtg			19
	•			
<210>	518			
<211>	21			
<212>				
<213>	Homo sapiens			
<400>	518			
ctgagct	ctt cctcctacac a			21
		•	•	
<210>	519			
<211>	19			
<212>				
<213>	Homo sapiens			
<400>	519			
	gt tetecaggt			19
<210>	<b>52</b> 0			
<211>	18			
<212>	DNA			
<213>	Homo sapiens			

<400> aggtctca	520 ggt cagggcca	18
<210><211><211><212><213>	521 23 DNA Homo sapiens	
<400>	521	
	ctc catgaggtat ttc	23
Ü		
<210><211><211><212><213>	522 1020 DNA Homo sapiens	
<220> <221> <222> <223>	misc_feature (955)(957) n is a, c, g, or t	
<400>	522	
gagacet cgcgggg gacaget agcetge agcatgt gcctacg gacacgg agaget tggcage ggagat tacacat tettecea	eggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca agaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga gec atgtacagca tgaggggetg ccgaagecee teaceetgag atgggageeg agt ccaeegteee categtggge attgttgetg geetggetgt cetannngea tea teggagetgt ggtegetget gtgatgtgta ggaggaagag tteaggtgga	60 120 180 300 360 420 480 540 600 660 720 780 840 900 960 1020
<210><211><211><212><213>	523 1009 DNA Homo sapiens	
gagacci cgcgggggggaccggaggaggaggaggaggaggaggagga	tea tggcgcccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc tggg ccggctcca ctccatgagg tatttctaca cctccgtgtc ccggcccggc	300 360 420 480

220 / 752

PCT/JP2004/019763

120

300

360

420

180

240

480

546

240

· 540

gacaagetgg agegegetga ecceecaaag acacaegtga eccaecacee catetetgae 660 720 catgaggcca ccctgaggtg ctgggccctg ggtttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 960 tetteceagt ceaeegteec categtggge attgttgetg geetggetgt cetageagtt 1009 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagtt

<210> 524

<211> 546 <212> DNA

<213> Homo sapiens

<400> 524

60 geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageece getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acagatetac aaggeecagg cacagaetga eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct gegaegtggg geeggaeggg egeeteetee gegggeatga eeagtaegee taegaeggea aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc agatcaccca gegeaagtgg gaggeggecc gtgaggegga geageggaga gectacctgg agggegagtg egtggagtgg etcegeagat acetggagaa egggaaggae aagetggage gcgctg

<210> 525

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 525

atgetggtca tggcgccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc 60 gagacetggg ceggetecea etceatgagg tatttetaea eetcegtgte eeggeeegge 120 egeggggage eeegetteat eteagtggge taegtggaeg acacceagtt egtgaggtte 180 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggaccggaa cacacagatc tacaagacca acacacagac tgaccgagag 360 ageetgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag 420 agcatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca tgaccagtac gcctacgacg gcaaggatta categeeetg aacgaggace tgegeteetg gacegeegeg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagcgg 540 600 agageetace tggagggega gtgegtggag tggeteegea gatacetgga gaacgggaag gacaagetgg agegegetga ecceecaaag acaeaegtga eccaecaeee eatetetgae 660 catgaggeea ceetgaggtg etgggeeetg ggtttetace etgeggagat cacaetgace 720 tggcageggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 900 tetteceagt ecacegtece eategtggge attgttgetg geetggetgt eetageagtt 960 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga

<210> 526

1017 <211>

<212> DNA

<213> Homo sapiens

<400> 526

atgetggtea tggegeeeeg aaccgteete etgetgetet eggeggeeet ggeeetgace gagacetggg eeggeteeca etceatgagg tatttetaca eetcegtgte eeggeeegge

cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacccagtt cgtgaggttc	180
gacagegaeg cegegagtee gagagaggag cegegggege egtggataga geaggagggg	240
ccggagtatt gggaccggaa cacacagatc tacaaggccc aggcacagac tgaccgagag	300
agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag	360
agcatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca tgaccagtac	420
gcctacgacg gcaaggatta categeeetg aacgaggace tgegeteetg gacegeegeg	480
gacacggegg ctcagatcac ccagcgcaag tgggaggegg cccgtgaggc ggagcaggac	<b>54</b> 0
agagcetace tggagggega gtgcgtggag tggctccgca gatacetgga gaacgggaag	600
gacaagetgg agegegetga ecceecaaag acacaegtga eccaecacee catetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggtttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg	900
tetteccagt ceacegtece categtggge attgttgetg geetggetgt cetageagtt 96	60
gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga	1017

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 527

60 atgetggtea tggegeeeeg aacegteete etgetgetet eggeggeeet ggeeetgaee 120 gagacetggg ceggetecea etceatgagg tatttetaca ceteegtgte eeggeeegge 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacagatc tacaaggccc aggcacagac tgaccgagag 360 ageetgegga acetgegegg etaetacaac cagagegagg eegggtetea caccetecag agcatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagtac 420 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgcgeteetg gacegeegeg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagcgg agagectace tggagggega gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gacaagetgg agegegetga cececcaaag acacaegtga cecaccaece catetetgae catgaggcca ccctgaggtg ctgggccctg ggtttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg tetteccagt ceaceatece eategtggge attgttgetg geetggetgt eetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga

240

300

540

600

780

<210> 528

1017 <211>

<212> DNA

<213> Homo sapiens

<400> 528

atgetggtea tggegeeeeg aacegteete etgetgetet eggeggeeet ggeeetgace 60 120 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacccagtt cgtgaggttc 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacagatc tacaaggccc aggcacagac tgaccgagag 300 360 ageetgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag 420 agcatgtacg getgegacgt ggggeeggac gggegeetee teegegggea taaccagtac gectacgacg geaaggatta categeeetg aacgaggace tgegeteetg gacegeegeg 480 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagcgg agagectace tggagggega gtgegtggag tggeteegea gatacetgga gaaegggaag 600 660 gacaagetgg agegegetga ecceecaaag acacaegtga eccaecace catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggtttctacc ctgcggagat cacactgacc

tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccaggagatagaa ccttccagaa gtgggcagct gtggtggtgc cttctggaga agagcag tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagc tcttcccagt ccaccgtccc catcgtgggc attgttgctg gcctggctgt cctagcagtt gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga	aga 840
<210> 529	

546 <211> DNA <212> <213> Homo sapiens

<400> 529

60 geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageece 120 getteatete agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acagatctac aaggcccagg cacagactga ccgagagagc ctgcggaacc 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 360 gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtacgcc tacgacggca 420 aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc gcgctg

180

240

480

540

546

619

60

<210> 530 <211> 546 <212> DNA

<213> Homo sapiens

<400> 530ggctcccact ccatgaggta tttctacacc tccgtgtccc ggcccggccg cggggagccc 120 cgcttcatct cagtgggcta cgtggacgac acccagttcg tgaggttcga cagcgacgcc 180 gcgagtccga gagaggagcc gcgggcgccg tggatagagc aggaggggcc ggagtattgg 240 gaccggaaca cacagatett caagaccaac acacagactg accgagagag cetgeggaac 300 ctgcgcggct actacaacca gagcgaggcc gggtctcaca ccctccagag catgtacggc 360 tgcgacgtgg ggccggacgg gcgcctcctc cgcgggcatg accagtacgc ctacgacggc 420 aaggattaca tegecetgaa egaggacetg egeteetgga eegeeggga eaeggegget 480 cagatcacce agegeaagtg ggaggeggee egtgaggegg ageageggag agectacetg 540 gagggcgagt gcgtggagtg gctccgcaga tacctggaga acgggaagga caagctggag 546 cgcgct

<210> 531 <211> 619 <212> DNA

<213> Homo sapiens

<400> 531

60 atgctggtca tggcgccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc 120 gagacetggg eeggeteeca etceatgagg tatttetaca eetcegtgte eeggeeegge cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacccagtt cgtgaggttc 180 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacagatc tacaaggccc aggcacagac tgaccgagag 300 agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag 360 420 agcatgtacg getgegacgt ggggeeggae gggegeetee teegegggea tgaccagtee gectaegaeg geaaggatta categeeetg aacgaggaee tgegeteetg gaeegeegeg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagcgg 540 agagectace tggagggega gtgcgtggag tggctccgca gatacetgga gaacgggaag 600 gacaagctgg agcgcgctg

•	
<210> 532 <211> 546 <212> DNA <213> Homo sapiens	
<400> 532 geteceaete catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggaegaca eccagttegt gaggttegae agegaegeeg egagteegag agagggeeg egggeeget ggataggageeg gagtattggg acceggaacae acagatetge aaggeeeagg cacagaetga ecgagagage etgeggaace tgeegggeta etacaaceag agegaggeeg ggteteacac ectecagage atgtaegget gegaegtggg geeggeegggeeg	60 120 180 240 300 360 420 480 540 546
<210> 533 <211> 546 <212> DNA <213> Homo sapiens	
<400> 533 geteceaete catgaggtat ttetacaeet cegtgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg egagteegag agaggageeg egggegeegt ggatagagea ggaggggeeg gagtattggg accggaacae acagatetae aaggeeeagg cacagaetga eegagagaae etgeggaace tgegeggeta etacaaeeag agegaggeeg ggteteaeae eeteeagae atgtaegget gegaegtggg geeggaeggg egeeteetee geggeatga eeagteegee tacgaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeegeggae aeggeggete agateaeeca gegeaagtgg gaggeggeee gtgaggegga geageggag geetaeetgg agggegagtg egtggagtgg eteegeagat aeetggagaa egggaaggae aggetggeetg	60 120 180 240 300 360 420 480 540 546
<210> 534 <211> 546 <212> DNA <213> Homo sapiens	
<400> 534 geteccacte catgaggtat ttetacacet cegtgteeeg geceggeege ggggageece getteatete agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg egagteega gaggaegeeg gagtattggg accggaeca acagatetae aaggeecagg cacagaetga eegagggeeg gagtattggg accggaeca cacagatetae aaggeecagg eacagaetga eegagaggee etgeggaace tgeggeeta etacaaceag agegaggeeg ggteteacat catecagagg atgtatgget gegaeetggg gecegaeggg egeeteetee gegggeatga ecagtaegee tacgaeggea aggattacat egeectgaae gaggaeetge geteetggae egeegggae aeggeggete agateacea gegeaagtgg gaggeggeee gtgaggegga geageggaga geetaeetgg agggegagtg egtggagtgg eteegeagat acctggagaa egggaaggae aagetggagggeetg	240 300 360 420 480

<210> 535 <211> 546 <212> DNA

<213> Homo sapiens

<400> 535 geteceaete catgaggtat ttetaeaeet eegtgteeg geeggeege ggggageeee getteatete agtgggetae gtggaegaea eeeagttegt gaggttegae agegaegeeg egagteegag aggggageeg egggeegeegt gggtggagea ggaggggeeg gagtattggg acegggagae acagaagtae aagegeeagg cacaggetga eegagtgage etgeggaaee tgegeggeta etaeaaeeag agegaggeeg ggteteaeae eeteeagage atgtaeget gegaegtggg geeggaeggg egeeteetee gegggeatga eeagtaegee taegaeggea aggattaeat egeeetgaae gaggaeetee geteetgae egeegeggae aeggeggee aggattaeat egeeetgaae gaggaeetee geteetgae geegeeggae aeggeggeete agateaeeea gegeaagtgg gaggeggeee gtgaggegga geageggaga geetaeetgg agggegagtg egtggagtgg eteegeagat acetggagaa egggaaggae aagetggage gegetg	60 120 180 240 300 360 420 480 540 546
<210> 536 <211> 546 <212> DNA <213> Homo sapiens	
<400> 536 geteceaete catgaggtat ttetacacet eegtgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggacgaca eecagttegt gaggttegae agegaegeeg egagteegag agaggageeg egggeeegt ggatagagea ggaggggeeg gagtattggg aceggaacac acagatetae aaggeeeagg eacagaetga eegagagage etgeggaace tgegeggeta etacaaceag agegaggeeg ggetetacat eatecagagg atgtacgget gegaegtggg geeggaeggg egeeteetee gegggtatga eeagtaegee taegaeggea aggattacat egeeetgaae gaggaeetge geteetggae egeegeggae aeggeggete agateaceca gegeaagtgg gaggeggeee gtgaggegga geageggaag geetaeetgg agggeggatg egtggagtgg etcegeagat acetggagaa egggaaggae aagetggage gegetg	60 120 180 240 300 360 420 480 540 546
<210> 537 <211> 546 <212> DNA <213> Homo sapiens	
<400> 537 geteceaete catgaggtat ttetacaeet cegtgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg egagteega gaggageege egagteega gaggageeg gagtattggg accggaacae acagatetae aaggeeeagg cacaggetga eegagtgage etgeggaace tgegeggeta etacaaeeag agegaggeeg ggteteaeae eeteeagage atgtaegget gegaegtggg geeggaeggg egeeteetee gegggeatga eeagtaegee tacgaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeegeggae aeggeggee agateaeee agateaeeea gaggaeggeee gtgaggegga geageggaa geetaeetgg aggeegatg egtggagtgg eteegeagat acctggagaa egggaaggae aagetggage gegetg	60 120 180 240 300 360 420 480 540 546
<210> 538 <211> 546 <212> DNA <213> Homo sapiens	
<400> 538 geteceaete catgaggtat ttetacacet cegtgteceg geceggeege ggggageece getteatete agtgggetae gtggacgaea eccagttegt gaggttegae agegaegeeg egagteegag agaggageeg egggegeegt ggatagagea ggaggggeeg gagtattggg aceggaacae acagatetae aagaceaaca cacagaetta eegagagage etgeggaace tgegeggeta etacaaceag agegaggeeg ggteteacae ectecagage atgtaegget	60 120 180 240 300

240

480

540

546

gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc gcgctg	360 420 480 540 546
<210> 539	
<211> 546	

<212> DNA

<213> Homo sapiens

<400>

geteceacte catgaggtat ttetacacet eegtgteeeg geeeggeege ggggageeee 60 getteatete agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg 120 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acagatetac aaggeecagg cacagaetga eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct 300 gcgacgtggg gccggacggg cgcctcctcc gcgggtatga ccagtccgcc tacgacggca 360 aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc 420 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc gcgctg

<210> 540< 211> 1017 <212> DNA Homo sapiens <213>

<400> 540

atgetggtea tggcgccccg aaccgteete etgetgetet eggeggeeet ggecetgace 60 120 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacccagtt cgtgaggttc 180 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 240 ccggagtatt gggaccggaa cacacagatc tacaaggccc aggcacagac tgaccgagag 300 agectgegga acetgegegg etactacaac cagagegagg cegggtetca cateatecag 360 aggatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca tgaccagtac 420 gcctacgacg gcaaggatta categeeetg aacgaggace tgegeteetg gacegeegeg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagcgg 540 agagcctacc tggagggcga gtgcgtggag tggctccgca gatacctgga gaacgggaag 600 gacaagetgg agegegetga ecceecaaag acacaegtga eccaecacee catetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggtttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 900 tetteccagt ceacegtece categtggge attgttgetg geetggetgt cetageagtt 960 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga 1017

<210> 541 <211> 546 <212> DNA <213> Homo sapiens

<400>

geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageeee 60 120 getteatete agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg 180 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accggaacac acagatetac aaggeecagg cacagactga ccgagagage ctgcggaacc

tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcaggacaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctggagc gcgcgg	300 360 420 480 540 546
<210> 542 <211> 546 <212> DNA <213> Homo sapiens	
<400> 542 geteccaete catgaggtat ttetacaeet eegtgteeg geeeggeege ggggageece getteatete agtgggetae gtggaegaea eecagttegt gaggttegae agegaegeeg egagteegag agaggageeg egggeeget ggatagagea ggaggggeeg gagtattggg aceggaaeae acagatetae aaggeeeagg eacagaetga eegagagage etgeggaaee tgegeggeta etacaaeeag agegaggeeg ggteteaeae eetecagage atgtaegget gegaegtggg geeggaeggg egeeteetee gegggeatga eeagtaegee tacgaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeegeggae aeggeggee agateaeea gegeaagtgg gaggeggee gtgaggegga geageggaa geetaeetgg aggeetgtg egtggagteg etecgeagat acetggagaa egggaaggae aagetggage gegetg	60 120 180 240 300 360 420 480 540 546
<210> 543 <211> 546 <212> DNA <213> Homo sapiens	
<400> 543 geteceaete catgaggtat ttetacaeet eegtgteeeg geeeggeege ggggagetee getteatete agtgggetae gtggacgaea eecagttegt gaggttegae agegaegeeg egagteega agaggageeg egagtattggg aceggaaeae acagatetae aaggeeeagg eacagaetga eegagaggee gagtattggg aceggaaeae acagatetae aaggeeeagg eacagaetga eegagaggee etgeggaaee tgeggeggeta etacaaeeag agegaggeeg ggteteaeae eetecagage atgtaegget gegaegtggg geeggaeggg egeeteetee gegggeatga eeagtaegee tacgaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeeggaeggee aeggeggee aggaeggee aggeeggee	60 120 180 240 300 360 420 480 540 546
<210> 544 <211> 546 <212> DNA <213> Homo sapiens	
<400> 544 geteceaete catgaggtat ttetacacet cegtgteceg geceggeege ggggageece getteatete agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg egagteega agagteega gaggageege gagtattggg accggaeca acagatetae aaggeeeagg cacagaetga eegagaggee gagtattggg accggaeca etacaaceag agegaggeeg ggteteaeae eetecagage atgtaegget gegaegtggg geeggaeggg egeeteetee gegggeatga eeagtaegee tacgaeggea aggattaeat egeeetgaae gaggaectge geteetgaae egeegegaae aeggeggete agateaeeca gegeaagtgg gaggeggeee gtgaggegga geageggaag geetaeetgg aggeegagtg egtggagtgg eteegeagat acetggagaa egggaaggae aagetggage gegetg	240 300 360 420 480

<210> 545 <211> 546 <212> DNA <213> Homo sapiens	
<400> 545 geteceaete eatgaggtat ttetaeaeet eegtgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggacgaca eeagttegt gaggttegae agegaegeeg egagteegag agaggageeg egggeeegt ggatagagea ggaggggeeg gagtattggg aceggaaeae acagatetae aaggeeeagg eacagaetga eegagggeeg etgeggaaee tgegeggeea etaeaaeeag agegaggeeg ggteteaeae eeteeagaeg atgtaegget gegaegtggg geeggaeggg egeeteetee gegggeatga eeagtaegee taegaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeegeggae aeggeggete agateaeea gegeaagtgg gaggeggeee gtgaggegga geageggaa geetaeetgg agggegagtg egtggagtgg eteeggaat aeetggagaa egggaaggae aagetggag agggeggeetg	60 120 180 240 300 360 420 480 540 546
<210> 546 <211> 546 <212> DNA <213> Homo sapiens	-
<400> 546 geteccaete catgaggtat ttetacaeet eegtgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggaegaea eecagttegt gaggttegae agegaegeeg egagteega agaggageeg egggeeegt ggatagagea ggaggggeeg gagtattggg aceggaaeae acagatetae aaggeeeagg eacagaetga eegagagae etgeggaaee tgegeggeta etacaaeeag agegaggeeg ggteteaeae eetecagage atgtaegget gegaegtggg geeggaeggg egeeteetee geggeatga eeagtaegee taegaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeegeggae aeggeggee agateaeee agateaeea gaggaeetge geteetggae gegeggaaggeete agateaeea gegeaagtgg gaggeggeee gtgaggegga geageggaag geetaeetgg agggeetgtg egtggagtgg eteegeagat acetggagaa egggaaggae aagetggage gegetg	60 120 180 240 300 360 420 480 540 546
<210> 547 <211> 546 <212> DNA <213> Homo sapiens	
<400> 547 geteceaete catgaggtat ttetacaeet eegtgteeg geeeggeege ggggageeee getteatete agtgggetae gtggacgaca eecagttegt gaggttegae agegacgeeg egagteega agaggageeg egagtattggg aceggaaeae acagatetae aaggeeeagg eacagaetga eegagaggee gagtattggg aceggaaeae acagatetae aaggeeeagg eacagaetga eegagagage etgeggaaee tgeggggeta etacaaecag agegaggeeg ggteteaeae eeteeagage atgtaegget gegacgtggg geeggaegggeeggeeggeetgaeeggeeggaeaggaeeggee aggataeae aggattaeat egeeetgaae gaggaeetge geteetggae egeeggaeaggeete agateaecea gegeaagtgg gaggeggeee gtgtggegga geaggaeaga geetaeetgg agggeggatg egtggagtgg eteegeagat acetggagaa egggaaggae aagetggage gegetg	240 300 360 420 480

<210> 548 <211> 546 <212> DNA <213> Homo sapiens

<400> 548

300

360

420

480

**540** 

546

180

240

480

60

180

240

gctcccactc catgaggtat ttctacacct ccgtgtcccg gcccggccgc ggggagcccc	60 120
getteatete agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg	180
cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acagatctac aaggcccagg cacagactga ccgagagagc ctgcggaacc	240
tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct	300
gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtacgcc tacgacggca	360
aggattacat egecetgaac gaggacetge geteetggae egeegeggae aeggeggete	420
agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg	480
agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc gcgctg	540 546
8-8-6	

<210> 549

<211> 546

<212> DNA

<213> Homo sapiens

<400> 549

60 geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageece getteatete agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acagatetec aagaceaaca cacagaetta ccgagaggae etgeggaece tgctccgcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct gegaegtggg geeggaeggg egeeteetee gegggeatga eeagtaegee tacgaeggea aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc agatcaccca gegeaagtgg gaggeggece gtgaggegga geageggaga gectacetgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc gcgctg

550<211> 546 <210>

<212> DNA

<213> Homo sapiens

 $550 {\tt gctcccactc}\ cat{\tt gaggtat}\ ttctacacct\ ccgt{\tt gtcccg}\ {\tt gccggccgc}\ {\tt ggggagcccc}$ 120 getteatete agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg 180 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accggaacac acagatetac aaggeecagg cacagactga ccgagagage ctgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct 360 gcgacgtggg gccggacggg cgcctcctcc gcgggtatga ccaggacgcc tacgacggca 420 aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc 480 agateaceca gegeaagtgg gaggeggeec gtgaggegga geageggaga geetacetgg 540 agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc 546 gcgctg

<210> 551

<211> 546

<212> DNA

<213> Homo sapiens

<400>

60 geteceacte catgaggtat ttegacaceg ceatgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg 120 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acagatetac aaggeecagg cacagactga ccgagagage ctgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct gegacgtggg geeggacggg egeeteetee gegggeatga ceagtacgee tacgacggca 360 aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc 420 agatcaccca gegeaagtgg gaggeggece gtgaggegga geageggaga geetacetgg

agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc gcgctg	540 546
<210> 552 <211> 546 <212> DNA <213> Homo sapiens	
ctccactc catgaggtat ttctacacct ccgtgtcccg gcccggccgc ggggagcccc gcttcatctc agtgggctac gtggacgaca cccagttcgt gaggttcgac agcgacgccg cgagtccgag agaggagccg ccggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acagatctac aaggcccagg cacagactga ccgagagagc ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gtcctggac cgccgcggac acggcggca aggattacat cgccctgaac gaggacctgc gtcctggac gccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaag gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc gcgctc	60 120 180 240 300 360 420 480 540 546
<210> 553 <211> 546 <212> DNA <213> Homo sapiens	
ectoceacte catgaggtat ttetacacet cegtgteceg geceggeege ggggagecee getteatete agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg egagteegag agaggageeg egggegeegt ggatagagea ggaggggeeg gagtattggg aceggaacae acagatetae aaggeecagg eacagaetga eegagagge etgeggaace tgegeggeta etacaaceag agegaggeeg ggteteacae eetecagage atgtaegget gegaegtggg geeggaeggg egeeteetee geggeatga ecagtaegee tacgaeggea aggattaeat egeeetgaae gaggaeetge geteetgae egeegeggae aeggeggee agateacea gegeaagtgg gaggeggee gteetetgae egeegeggae aeggeggete agateacea gegeaagtgg gaggeggee gtagggegga geageggaa geetaeetgg aggeeaegtg egtggagtgg eteegeagat acetggagaa egggaaggae aagetggage gegetg	60 120 180 240 300 360 420 480 540 546
<210> 554 <211> 1017 <212> DNA <213> Homo sapiens	
atgetggtea tggcgccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc gagacctggg ccggctcca ctccatgagg tatttcgaca ccgccatgtc ccggcccggc	60 120 180 300 360 420 480 540 600 660 720 780 840

900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 960 tetteccagt ecacegtece categtggge attgttgetg geetggetgt ectageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 555

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 555

60 atgetggtea tggegeeeeg aacegteete etgetgetet eggeggeeet ggeeetgace 120 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac tgaccgagag 300 aacetgegea eegegeteeg etaetacaac eagagegagg eegggtetea eaceeteeag 360 420 agcatgtacg getgegacgt ggggceggac gggcgcetec teegegggca taaccagtac 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgcggcg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcaggac 600 agagcctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 660 gacacgetgg agegegegga ecceccaaag acacacgtga eccaccacce catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 840 ggagatagaa ccttccagaa gtgggcagct gtggtggtgc cttctggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 960 tetteceagt ceaeegtece eategtggge attgttgetg geetggetgt eetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 556

<211> 526

<212> DNA

<213> Homo sapiens

<400> 556

60 ttcgacaccg ccatgtcccg gcccggccgc ggggagcccc gcttcatctc agtgggctac 120 gtggacgaca cgcagttcgt gaggttcgac agcgacgccg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acagatette 180 240 aagaccaaca cacagactta ccgagagaac ctgcggatcg cgctccgcta ctacaaccag 300 agegaggeeg ggteteacae eetecagage atgtaegget gegaegtggg geeggaeggg 360 cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aggattacat cgccctgaac 420 gaggacetge geteetggae egeggeggae acegeggete agateaceca gegeaagtgg 480 gaggcggccc gtgtggcgga gcaggacaga gcctacctgg agggcacgtg cgtggagtgg cteegeagat acetggagaa egggaaggae acgetggage gegegg

<210> 557

<211> 546

<212> DNA

<213> Homo sapiens

<400> 557

geteceacte catgaggtat ttegacaceg ceatgteeeg geeeggeege ggggageece getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggagggccg gagtattggg accggaacac acagatetec aagaccaaca cacagactga ccgagagage etgeggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcctggac cgcggcggac accgcggctc

60 120

180 240

526

300

agatcaccca gegeaagtgg gaggeggeee gtgtggegga geaggacaga geetacetgg agggeaegtg egtggagtgg eteegcagat acetggagaa egggaaggae aegetggage gegegg	480 540 546
<210> 558 <211> 546 <212> DNA <213> Homo sapiens	
Possessing and Page 111-Page 1	60 120 180 240 300 360 420 480 540 546
<210> 559 <211> 546 <212> DNA <213> Homo sapiens	
<400> 559 geteceaete catgaggtat ttegacaecg ceatgteecg geeeggeege ggggageece getteatete agtggetae gtggaegaea egeagttegt gaggttegae agegaegeeg egagteega agaggageeg egagtatgag agaggageeg egagtatgagaaea acagatette aagaceaaea cacagaetga eegagggeeg gagtattggg aceggaeaea etacaaecag agegaggeeg ggteteaeae eeteeagagaae etgegaegt gegaegtggg geegeteetee gegggeataa eeagtaegee taegaeggea aggattaeat egeetgaae gaggaeetge geteetggae egeegeggae acegeggete agateaecea gegeaagtgg gaggeggeee gtgaggegga geageggaga geetaeetgg agggeaegtg egtggagtgg eteegeagat acetggagaa egggaaggaegeggggggggggggggggggg	60 120 180 240 300 360 420 480 540 546
<210> 560 <211> 546 <212> DNA <213> Homo sapiens	
<400> 560 geteceaete catgaggtat ttegacaeeg ceatgteeeg geeeggeege ggggageeee getteatete agtggetae gtggacgaea egeagttegt gaggttegae agegaegeeg egagteega agaggageeg egagteega ggatatgag agaggageeg egagteega ggatatgag aceggaaeae acagatette aagaceaaea cacagaetga eegagggeeg atgtategge aceggaege etacaaeeag agegaggeeg ggteteaeae eeteeagage atgtaegget gegacgtggg geeggaeggg egeeteetee gegggeatga eeagtaegee tacgaeggea aggataeat egeeetgaae gaggaeetge geteetggae egeggeggae acegeggete agateaeeca gegeaagtgg gaggeggeee gtgtggegga geaggaeaga geetaeetgg agggeaegtg egtggaggaeggeeggaeaggaeggeeggaeagggeeggee	60 120 180 240 300 360 420 480 540

```
<211>
       546
<212>
       DNA
<213>
       Homo sapiens
<400> 561
                                                                   60
geteceacte catgaggtat ttegacaceg ceatgteeeg geeeggeege ggggageece
                                                                   120
getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg
                                                                      180
cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg
                                                                     240
accggaacac acagatette aagaccaaca cacagactga eegagagage etgeggaace
                                                                   300
tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct
                                                                    360
gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca
                                                                   420
aggattacat egecetgaac gaggacetge geteetggae egeggeggae acegeggete
                                                                     480
agateaceca gegeaagtgg gaggeggeee gtgtggegga geaggacaga geetacetgg
agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac acgctggagc
                                                                     540
                                                                       546
gcgcgg
<210>
       562
<211>
       546
<212>
        DNA
<213>
        Homo sapiens
<400>
       562
                                                                   60
geteceacte catgaggtat ttegacaceg ceatgteeeg geeeggeege ggggageece
                                                                   120
getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg
                                                                      180
cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg
                                                                     240
accgggacac acagatette aagaceaaca cacagaetga eegagagage etgeggaace
                                                                   300
tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct
                                                                    360
gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca
                                                                   420
aggattacat cgccctgaac gaggacctgc gctcctggac cgcggcggac accgcggctc
                                                                     480
agateaceca gegeaagtgg gaggeggee gtgtggegga geaggacaga geetacetgg
agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac acgctggagc
                                                                     540
                                                                       546
gcgcgg
<210>
        563
<211>
        546
<212>
        DNA
<213>
        Homo sapiens
<400> 563
                                                                   60
geteceacte catgaggtat ttegacaceg ceatgteeeg geeeggeege ggggageece
                                                                   120
getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg
                                                                      180
cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg
                                                                     240
aceggaacac acagatette aagaceaaca cacagactga eegagagage etgeggaace
                                                                   300
tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cetecagagc atgtacggct
                                                                    360
gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca
                                                                   420
aggattacat egecetgaac gaggacetge geteetggac egeggeggac acegeggete
                                                                     480
agatcaccca gegeaagtgg gaggeggeee gtgtggegga geaggacaga gectacctgg
                                                                     540
agggcgcgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac acgctggagc
                                                                       546
gcgcgg
<210>
        564
<211>
        546
<212>
        DNA
<213>
        Homo sapiens
```

<400> 564

getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg egagteegag agaggageeg egggegeegt ggatagagea ggaggggeeg gagtattggg	120
cgagteegag agaggageeg eggeegeeg ggatagagea ggaggagge etgeggaace tgegggata etacaaceag agegaggeeg ggteteacae eetecagagg atgtaegget gegaegtggg geeggaeggg egeeteetee gegggeataa ecagtaegee taegaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeggeggae aeegeggete agateaceea gegeaagtgg gaggeegeee gtgtggegga geaggaeaga geetaeetgg agggeaegtg egeggagtgg eteeggaataaeetgg gaggeaggae aeegeggee agggeaegtg egtggagtgg eteeggaataaeetggagaa egggaaggae aegetggage gegegg	180 240 300 360 420 480 540 546
<210> 565 <211> 546 <212> DNA <213> Homo sapiens	
<400> 565 geteceaete catgaggtat ttegacaecg ceatgteeg geeeggeege ggggageece getteatete agtgggetae gtggacgaea egeagttegt gaggttegae agegaegeeg egagteegag agaggageeg egggeegeegt ggatagagea ggaggggeeg gagtattggg aceggaaeae acagaetete aagaecaaea cacagaetga eegagggeeg etgeggaaee tgegeggeta etacaaecag agegaggeeg ggteteaeae eetecagage atgtaegget gegaegtggg geeggaeggg egeeteetee gegggeataa eegagaegee taegaeggea aggattaeat egeeetgaae gaggaeetg geteetgae egeggegae acegeggee agataeaeca gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetaeetgg agggeaegtg egtggagtgg eteegeagat acetggagaa egggaaggae acgetggage gegegg	60 120 180 240 300 360 420 480 540 546
<210> 566 <211> 546 <212> DNA <213> Homo sapiens	
<400> 566 geteceaete catgaggtat ttegacaceg ceatgteeg geeeggeege ggggageece getteatete agtgggetae gtggacgaca egeagttegt gaggttegae agegaegeeg egagteegag agaggageeg egggeegeet ggatagagea ggaggggeeg gagtattggg aceggaacae acagatette aagaceaaca cacagaetga eegagggeeg etgeggaace tgegeggeta etacaaceag agegaggeeg ggteteacae eetecagage atgtaegget gegaegtggg geeggaeggg egeeteetee gegggtaeea eegaggege aggataaca egggataea aggattaeat egeeetgaae gaggaeetge geteetggae egeggeggae acegeggete agateacea gegeaagtgg gaggeggeee gtgtggegga geaggaeaga geetaeetgg agggeaegtg egtggagtgg eteegeagat acetggagaa egggaaggae acgetggage gegegg	60 120 180 240 300 360 420 480 540 546
<210> 567 <211> 546 <212> DNA <213> Homo sapiens	
<400> 567 geteceaete catgaggtat ttegacaceg ceatgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggacgaca egcagttegt gaggttegae agegacgeeg egagteegag agaggageeg egggeeget ggatagagea ggaggggeeg gagtattggg aceggaacae acagatette aagaceaaca cacagaetga eegagtgage etgeggaace tgegeggeta etacaaceag agegaggeeg ggteteacae eetecagage atgtaegget gegacgtggg geeggaeggg egeeteetee gegggeataa ecagtaegee tacgaeggea aggattacat egeeetgaac gaggaeeteg geteetggae egeggeggae acegeggete	60 120 180 240 300 360 420

> 540 600

agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcaggacaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac acgctggagc gcgcgg	480 540 546	
<210> 568 <211> 546 <212> DNA <213> Homo sapiens		
<400> 568 geteceaete catgaggtat ttegacaceg ceatgteeg geeeggeege ggggageece getteatete agtgggetae gtggaegaca egeagttegt gaggttegae agegaegeeg egagteega agaggageeg egggegeegt ggatagagea ggaggggeeg gagtattggg aceggaacae acagatette aagaceaaca cacaggetga eegagagge etgeggaace tgegeggeta etacaaceag agegaggeeg ggteteaeae eetecagagg atgtaegget gegaegtggg geeggaeggeeg egeeteetee geggeataa eeagtaegee tacgaeggea aggattaeat egeetgaae gaggaeetge geteetggae egeggegae aeegeggete agateaeeca gegeaagtgg gaggegeee gtgtggegga geaggaeaga geetaeetgg agggeaegtg egtggagtgg eteeggaataa eetggagaa eegggaaggae aeegeggeggaeggeegggae	60 120 180 240 300 360 420 480 540 546	
<210> 569 <211> 822 <212> DNA <213> Homo sapiens		
ettceacte catgaggtat ttegacaceg ceatgteeg geeeggeege ggggageece gettcatete agtgggetae gtggacgaca egeagttegt gaggttegae agegaegeeg egagteega agaggageeg egggegeegt ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaca cacagaetga eegaggaac etgeggaace tgegeggeta etacaaceag agegaggeeg ggteteacae eetecagage atgtaegget gegacgtggg geeggaegge egeeteetee gegggeataa ecagtaegee taegaeggea aggattacat egeeetgaae gaggaeetge geteetggae egeggegae acegeggete agateaceea gegeaagtgg gaggeegee gtgtggagae geeggegae acegeggete agateaceea gegeaagtgg gaggeggeee gtgtggegga geaggaeaga geetaeetgg agggeaegtg ettegagata acetggagaa egggaaggae acegeggae geegggaeee eegeggaee eegeggaee eegeggaeee eegeggaeee eegeggaeee eegeggaeee tetaceetg gagaateae acegeggatg geeggageee ggaggaeea acegeggatg geaggaeea acegeggaee tetaceetg eggagateae actgaeetgg eageggatg geaggaeea acetaggeet tetaceetg eggagateae actgaeetgg eageggatg geaggaeea acetaggeet tetaceetg eggagateae acegegggatg geaggaeea acetaggeetg gtggtgeett etggagaaea aceageagga gatagaaeet tecagaagtg ggeagetgtg gtggtgeett etggagaaga geagagatae acatgeeatg taeageatga ggggetgeeg aageceetea eectgagatg gg	60 120 180 240 300 360 420 480 540 600 660 720 780 822	
<210> 570 <211> 1017 <212> DNA <213> Homo sapiens		
<400> 570atgegggtca eggegeceeg aaceeteete etgetgetet ggggggeagt ggegggggggggg	240 300 360 420	60

aggatgtatg getgegacet ggggeeggae gggegeetee teegegggea taaceagtta

gectaegaeg geaaggatta eategeetg aacgaggaee tgageteetg gaeegeggeg gaeacegegg eteagateae eeageteaag tgggaggegg eeegtgtgge ggageagetg

agagcctacc tggagggcga gtgcgtggag tggctccgca gatacctgga gaacgggaag

gagacgetge agegegegga ccccccaaag acacacgtga cccaccaccc catetetgac	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtgc ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca	900
	60
gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga	1017

<211> 1017

<212> DNA

<213> Homo sapiens

## <400> 571

atgegggtea eggegeeeg aacceteete etgetgetet ggggggeagt ggeeetgace 60 gagacetggg eeggeteeca etecatgagg tatttetaca eegecatgte eeggeeegge 120 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacccagtt cgtgaggttc 180 gacagegaeg ceaegagtee gaggatggeg eeeegggege eatggataga geaggaggg 240 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 300 aacetgegea eegegeteeg etactacaae eagagegagg eegggtetea eaettggeag 360 acgatgtatg getgegaeet ggggeeggae gggegeetee teegegggea taaccagtta 420 gcctacgacg gcaaggatta categecetg aacgaggace tgageteetg gacegeggeg 480 gacaccgcgg ctcagatcac ccagctcaag tgggaggcgg cccgtgtggc ggagcagctg 540 agageetace tggagggega gtgegtggag tggeteegea gatacetgga gaaegggaag 600 gagacgetge agegegegga ecceecaaag acacaegtga eccaecacce catetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 tetteccagt ceaeegteec categtggge attgttgetg geetggetgt cetageagtt 960 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 572

<211> 1017

<212> DNA

<213> Homo sapiens

# <400> 572

atgegggtea eggegeeeg aacceteete etgetgetet ggggggeagt ggeeetgace 60 gagacetggg ceggetecea etceatgagg tatttetaea eegecatgte eeggeeegge 120 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacccagtt cgtgaggttc 180 gacagcgacg ccacgagtcc gaggatggcg ccccgggcgc catggataga gcaggagggg 240 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 300 aacetgegea eegegeteeg etaetacaac cagagegagg eegggtetea caettggeag 360 acgatgtatg gctgcgacct ggggccggac gggcgcctcc tccgcgggca taaccagtta 420 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 agagcctacc tggagggcct gtgcgtggag tggctccgca gatacctgga gaacgggaag 600 gagacgetge agegegegga ecceecaaag acaeaegtga eccaecace catetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacatgce atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 tetteccagt ceacegtece categtggge attgttgetg geetggetgt cetageagtt 960 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga 1017

120

300

360

420

60

180

360

420

480

540

720

600 660

240 300

480

540

546

180

240

<211> 1017 <212> DNA

<213> Homo sapiens

<400> 573

60 atgegggtea eggegeeceg aacceteete etgetgetet gggggggagt ggeeetgace 120 gagacetggg ceggetecea etecatgagg tatttetaca eegecatgte eeggeeegge 180 cgeggggage ceegetteat caeegtggge taegtggaeg acaeecagtt egtgaggtte 240 gacagcgacg ccacgagtec gaggatggcg ccccgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 aacctgcgca ccgcgctccg ctactacaac cagagcgagg ccgggtctca cacttggcag 420 acgatgtatg gctgcgacct ggggccggac gggcgcctcc tccgcgggca tgaccagtcc 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 600 agagcetace tggagggeet gtgcgtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga cececcaaag acacatgtga eccaccacce catetetgae 720 catgaggeca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccaaagcccc tcaccctgag atgggagcca 960 tetteceaat ceacegtece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 574

<211> 546

<212> DNA

<213> Homo sapiens

## <400> 574

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece getteateae egtgggetae gtggaegaea eccagttegt gaggttegae agegaegeea cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagaac etgegeaccg cgctccgcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct gcgacctggg gccggacggg cgcctcctcc gcgggcataa ccagttagcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca geteaagtgg gaggeggeec gtgtggegga geagetgaga geetacetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 575

<211> 1017

<212> DNA

<213> Homo sapiens

## <400> 575

atgegggtea eggegeeeeg aacceteete etgetgetet ggggggeagt ggeeetgace gagacetggg eeggeteeca etecatgagg tatttetaca eegecatgte eeggeeegge 120 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacccagtt cgtgaggttc gacagegacg ccaegagtee gaggatggeg eccegggege catggataga geaggagggg ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag aacctgcgca ccgcgctccg ctactacaac cagagcgagg ccgggtctca cacttggcag acgatgtatg getgegacet ggggeeggae gggeegeetee teegegggea taaccagtta gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeggeg gacaccgcgg ctcagatcac ccagctcaag tgggaggcgg cccgtgtggc ggagcagctg agagcctgcc tggagggcga gtgcgtggag tggctccgca gatacctgga gaacgggaag gagacgetge agegegegga ecceecaaag acacaegtga eccaecacee eatetetgae catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc

tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagc	a 780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca	900
tetteccagt ceacegteec categtggge attgttgetg geetggetgt cetageagtt	960
gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga	1017

<211> 546

<212> DNA

<213> Homo sapiens

<400> 576

60 geteceaete eatgaggtat ttetaeaeeg ceatgteeeg geeeggeege ggggageeee 120 getteateae egtgggetae gtggaegaea eccagttegt gaggttegae agegaegeea cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct gegacetggg geeggaeggg egeeteetee gegggeataa eeagttagee tacgaeggea aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca getcaagtgg gaggeggeee gtgtggegga geagetgaga geetaeetgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 577

<211> 546

<212> DNA

<213> Homo sapiens

<400> 577

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee getteateae egtgggetae gtggaegaea eccagttegt gaggttegae agegaegeea cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagaac etgegeaccg cgctccgcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gegacgtggg gecggacggg cgcctcctcc gegggtatga ccagtccgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca getcaagtgg gaggeggeec gtgtggegga geagetgaga geetaeetgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

480 540 **546** 

180

240 300

360

420

60

120

300

360

420

180

240

480

540

546

<210> 578

<211> 822

<212> DNA

<213> Homo sapiens

<400> 578

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee getteateae egtgggetae gtggaegaea eccagttegt gaggttegae agegaegeea cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaccaaca cacagaetta eegagagaac etgegcaccg cgctccgcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gcgacctggg gccggacggg cgcctcctcc gcgggcataa ccagttagcc tacgacggca aggattacat egecetgaac gaggacetga geteetggae egeggeggae acegeggete agatcaccca geteaagtgg gaggeggeec gtgtggegga geagetgaga geetacetgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gegeggacce eccaaagaca caegtgacce accaececat etetgaccat gaggecacce tgaggtgctg ggccctgggc ttctaccctg cggagatcac actgacctgg cagcgggatg

> 420 480

gcgaggacca aactcaggac actgagcttg tggagaccag accagcagga gatagaacct	720
tccagaagtg ggcagctgtg gtggtgcctt ctggagaaga gcagagatac acatgccatg	780
tacagcatga ggggctgccg aagcccctca ccctgagatg gg	822

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 579

60 atgctggtca tggcgccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc 120 gagacetggg ceggetecea etceatgagg tatttetaca eetcegtgte eeggeeegge 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggaatatt gggaccggaa cacacagatc tgcaagacca acacacagac tgaccgagag 300 360 agectgegga acetgegegg etactacaac cagagegagg eegggtetea caecetecag 420 tggatgtatg getgegaegt ggggeeggae gggegeetee teegegggta taaccagtte 480 geetacgacg geaaggatta categeeetg aacgaggace tgageteetg gacegeggeg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 540 agagectace tggagggeae gtgegtggag tggeteegea gacacetgga gaaegggaag 600 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacce catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 840 ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgee atgtacagea tgaggggetg eegaageeee teaccetgag atgggageea  $tetteceagt\ ceaeegteec\ categtggge\ attgttgetg\ geetggetgt\ cetageagtt$ 960 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga

<210> 580

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 580

60 atgctggtca tggcgccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc 120 gagacctggg ceggetecea etceatgagg tatttetaea eegeegtgte eeggeegge 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggaatatt gggaccggaa cacacagatc tgcaagacca acacacagac tgaccgagag 360 agectgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag 420 tggatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggta taaccagttc 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 600 agagectace tggagggeae gtgegtggag tggeteegea gacacetgga gaaegggaag 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacce catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgce atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ceaecgtece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga

<210> 581

<211> 822

<212> DNA

<213> Homo sapiens

	•
<400> 581 geteceaete catgaggtat ttetacaceg eegtgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagteegag agaggageeg egggeeegt ggatagagea ggaggggeeg gaatattggg aceggaaeae acagatetge aagaceaaea cacagaetga eegaggggeeg gaatattggg aceggageta etacaaeeag agegaggeeg ggteteaeae eetecagtgg atgtatgget gegaegtggg geeggaeggg egeeteetee gegggtataa eeagttegee tacgaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egeggegae acegeggete agateaeeea gegeaagtgg gaggeggeee gtgaggegga geageggag geeteetgg aggaeaegtg egtggagtgg eteegeagae acetggagaa egggaaggag acetaeetgg agggeaegtg egtggagtgg eteegeagae acetggagaa egggaaggag acetaeetgg agggeaegt egtggagtgg eteegeagae acetggagaa egggaaggag acetgeage gegeggaeee eceaaagaea eatgtgaeee aceaeeeeat etetgaeeat gaggeeaeee tgaggtgetg ggeeetggge ttetaceetg eggagateae actgaeetgg eageggatg gegaggaeea aaeteaggae acegagettg tggagaeeag aceageagga gacagaaeet tecagaagtg ggeagetgtg gtggtgeett etggagaaga geagagatae acatgeeatg tecagaagtg ggeagetgtg gtggtgeett etggagaaga geagagatae acatgeeatg tacagcatga ggggetgeeg aageeeetea eeetgagatg gg	60 120 180 240 300 360 420 480 540 600 660 720 780 822
<210> 582	
<211> 546 <212> DNA	
<213> Homo sapiens	
<400> 582 geteceaete catgaggeat ttetaeaeeg eegtgteeeg geceggeege ggggageeee getteatete agtgggetae gtggacgaca egeagttegt gaggttegae agegacgeeg egagteegag agaggageeg egggeeget ggatagagea ggaggggeeg gaatattggg aceggaaeae acagaaetge aagaceaaea cacagaetga eegagggeeg gaatattggg acegggeta etaeaaeeag agegaggeeg ggteteaeae eeteeagtgg atgtatgget gegacgtggg geeggacggg egeeteetee gegggtataa eeagttegee taegaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egeggegee agateaeeea gegeaagtgg gaggeggeee gtgaggegga geagetgaa geetaeetgg agggeaegtg egtggagtgg eteegeagae acetggagaa egggaaggag aegetgage gegeegg	60 120 180 240 300 360 420 480 540 546
<210> 583	
<211> 619 <212> DNA	
<213> Homo sapiens	
	60 120 180 240 300 360 420 480 540 600 619
<210> 584	

<210> 584 <211> 546

<212> DNA <213> Homo sapiens

<400> 584

240

420

480

540 546

240

300

540

780

840

geteceacte catgaggtat ttetacaceg cegtgteceg geceggeege ggggageeee	60
getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg	120
cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gaatattggg	180
accggaacac acagatetge aagaccaaca cacagaetga cegagagage etgeggaace	240
tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct	300
gcgacgtggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca	360
aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc	420
agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg	480
agggcacgtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc	<b>540</b>
gcgcgg	546

<210> 585

<211> 546

<212> DNA

<213> Homo sapiens

## <400> 585

60 geteceaete catgaggtat ttetacaceg cegtgteceg geceggeege ggggageece 120 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gaatattggg accggaacac acagatetge aagaceaaca cacagaetga eegagagage etgeggaace 300 tgegeggeta etacaaccag agegaggeeg ggteteacae eetecagagg atgtatgget 360 gcgacgtggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 586

<211> 1017

<212> DNA

<213> Homo sapiens

#### <400> 586

atgegggtea eggegeeeeg aacegteete etgetgetet egggageeet ggeeetgace 60 120 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagegaeg cegegagtee gaggatggeg ceeegggege catggataga geaggagggg ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 ageetgegga acetgegegg etaetacaac cagagegagg eegggtetca caccetecag 420 aggatgtacg getgegaegt ggggeeggae gggegeetee teegegggea tgaceagtee gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeggeg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg 600 agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag gagacgetge agegegegga ecceecaaag acacatgtga eccaecace catetetgae 660 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca  $tetteccagt\ ccaccatecc\ categtggge\ attgttgctg\ gcetggetgt\ cctageagtt$ 960 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 587

<211> 546

<212> DNA

<213> Homo sapiens

222.132	
<400> 587 geteceaete catgaggtat ttetacaeeg ceatgteeeg geeggeege ggggageeee getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg egagteegag gatgeegee egagteegag gatggegeee egggegeeat ggatagagea ggagggeeg gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegagagae etgeggaaee tgegeggeta etacaaeeag agegaggeeg ggteteaeae eetecagagg atgtaegget gegaegtggg geeggaeggg egeeteetee gegggeatga ecagteegee tacgaeggea aagattacat egeeetgaae gaggaeetga geteetggae egegeggee agateaeeea gegeagteg gaggeeggeee gtgaggegga geagtggaga geetaeetgg agggeetgte egggeetgt egtggagtgg eteegeagat acetggagaa egggeetggagaggeeggg	60 120 180 240 300 360 420 480 540
<210> 588 <211> 546 <212> DNA <213> Homo sapiens	
<400> 588 geteceaete catgaggtat ttetacaeeg ceatgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggacgaca eccagttegt gaggttegae agegaegeeg egagteegag gatggegeee egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaccaaca cacagaetta eegagagage etgeggaaee tgegeggeta etacaaeeag agegaggeeg ggeteeaeae eetecagagg atgtaegget gegaegtggg geeggaeggg egeeteetee gegggeatga ecagteegee tacgaeggea aggattacat egeeetgaat gaggaeetga geteetggae egeggegee agateaeeea gegeaagtgg gaggeggeee gtgaggegga geagtggaag geetaeetgg agggeetgtg egtggagtgg eteegeagat acetggagaa egggaaggag acgetgeage gegegg	60 120 180 240 300 360 420 480 540 546
<210> 589 <211> 546 <212> DNA <213> Homo sapiens	
<400> 589 geteceaete catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggacgaca egeagttegt geggttegae agegaegeeg egagteegag gatggegeee egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaca cacagaetta eegagagage etgeggaace tgegeggeta etacaaceag agegaggeeg ggteteacac ectecagagg atgtacgget gegacettggg geeggaeggg egeeteetee gegggeatga ecagteegee tacgaeggea aggattacat egecetgaae gaggaeetga geteetggae egeggegea aeggeggee agatacacea gegeaagtgg gaggeggeee gtgaggegga geagtggaa geetacetgg agggeetgtg egtggagtgg eteegeagat acetggagaa egggaaggag aegetgeage gegegg	60 120 180 240 300 360 420 480 540 546
<210> 590 <211> 1017 <212> DNA <213> Homo sapiens	
<400> 590 atgegggtea eggegeeeg aacegteete etgetgetet egggageeet ggeeetgace gagacetggg eeggeteeca etceatgagg tatttetaca eegecatgte eeggeeegge egeggggage eeegetteat egcagtggge taegtggaeg acaceeagtt egtgaggtte	60 120 180 240

agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca catcatccag	360
aggatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggta tgaccagtcc	420
gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg	480
gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg	<b>54</b> 0
agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaaegggaag	600
gagacgetge agegegegga ecceecaaag acacatgtga eccaecacee catetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca	900
tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 9	60
gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga	1017

<211> 1017

<212> **DNA** 

<213> Homo sapiens

### <400> 591

60 atgcgggtca cggcgccccg aaccgtcctc ctgctgctct cgggagccct ggccctgacc 120 180 egeggggage ecceetteat etcagtggge taegtggaeg acaegcagtt egtgaggtte gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 240 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag 360 aggatgtacg getgegacgt ggggeeggac gggegeetee teegegggea tgaccagtee 420 480 gectacgaeg geaaggatta categeeetg aacgaggaee tgageteetg gaeegeggeg 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 600 agagcctacc tggagggcct gtgcgtggag tggctccgca gatacctgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacee catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcageggg atggcgagga ccaaactcag gacacegage ttgtggagae cagaceagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteceagt ceaccatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 592

<211> 1017

<212> DNA

<213> Homo sapiens

## <400>

60 atgegggtea eggegeeeg aacegteete etgetgetet egggageeet ggeeetgaee 120 180  $cgcggggagc\ cccgcttcat\ cgcagtgggc\ tacgtggacg\ acacccagtt\ cgtgaggttc$ gacagcgacg ccgcgagtcc gaggatggcg ccccgggcgc catggataga gcaggagggg ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag agectgegga acetgegegg etactacaac cagagegagg cegggtetea caettggeag acgatgtatg getgegacgt ggggeeggac gggegeetee teegegggea tgaccagtee gcetacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeggeg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg agagcctacc tggagggcct gtgcgtggag tggctccgca gatacctgga gaacgggaag gagacgetge agegegegga ecceecaaag acacatgtga eccaecacee catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca

240

300

360

420

480

540

780 840

600

660

tetteceagt ceaceatece eategtggge attgttgetg geetggetgt eetageagtt gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga 960 1017

180

240

540

720

<210> 593 <211> 945

<212> DNA <213> Homo sapiens

<400> 593

60 ggeteceact ceatgaggta tttetacace gecatgteec ggeeeggeeg eggggageee 120 egetteateg eagtgggeta egtggaegae acceagtteg tgaggttega eagegaegee gcgagtccga ggatggcgcc ccgggcgcca tggatagagc aggaggggcc ggagtattgg gaccgggaga cacagatete caagaccaae acacagaett accgagagag cetgeggaae 300 etgegegget actacaacca gagegaggee gggteteaca ecetecagag gatgtaegge 360 tgcgacgtgg ggccggacgg gcgcctcctc cgcgggcatg accagtccgc ctacgacggc 420 aaggattaca tegecetgaa egaggaeetg ageteetgga eegeggegga eaeggegget 480 cagateacce agegeaagtg ggaggeggee egtgtggegg ageagetgag ageetaeetg gagggeetgt gegtggagtg geteegeaga taeetggaga aegggaagga gaegetgeag cgegeggace ecceaaagae acatgtgace caceaececa tetetgacea tgaggecace 600 660 ctgaggtgct gggccctggg cttctaccct gcggagatca cactgacctg gcagcgggat ggcgaggacc aaactcagga caccgagctt gtggagacca gaccagcagg agatagaacc **7**80 ttccagaagt gggcagctgt ggtggtgcct tctggagaag agcagagata cacatgccat 840 gtacageatg aggggetgee gaageeeete accetgagat gggageeate tteecagtee 900 accateceea tegtgggeat tgttgetgge etggetgtee tageagttgt ggteategga gctgtggtcg ctactgtgat gtgtaggagg aagagctcag gtgga 945

<2·10> 594

<211> 945

<212> DNA

<213> Homo sapiens

<400> 594

ggeteceaet ceatgaggta tttetacaee geeatgteee ggeeeggeeg eggggageee 60 120 egetteateg eagtgggeta egtggaegae acceagtteg tgaggttega eagegaegee 180 gcgagtccga ggatggcgcc ccgggcgcca tggatagagc aggaggggcc ggagtattgg gaccgggaga cacagatete caagaccaae acacagaett accgagagag cetgeggaae 240 ctgegegget actacaacca gagegaggee gggteteaca ecetecagag gatgtttgge 300 tgcgacgtgg ggccggacgg gcgcctcctc cgcgggtatg accagtccgc ctacgacggc 360 aaggattaca tegecetgaa egaggacetg ageteetgga eegeggegga eaeggegget 420 cagateacce agegeaagtg ggaggeggee cgtgaggegg ageagetgag ageetacetg 480 gagggcctgt gcgtggagtg gctccgcaga tacctggaga acgggaagga gacgctgcag 540 600 egegeggace ecceaaagae acatgtgace caccaceca tetetgacea tgaggecace 660 ctgaggtget gggeeetggg ettetaeeet geggagatea eaetgaeetg geagegggat ggcgaggacc aaactcagga caccgagett gtggagacca gaccagcagg agatagaacc ttccagaagt gggcagctgt ggtggtgcct tctggagaag agcagagata cacatgccat 780 gtacagcatg aggggctgcc gaagcccctc accctgagat gggagccatc ttcccagtcc 840 accatececa tegtgggeat tgttgetgge etggetgtee tageagttgt ggteategga 900 gctgtggtcg ctactgtgat gtgtaggagg aagagctcag gtgga 945

<210> 595

<211> 945

<212> DNA

Homo sapiens <213>

<400> 595

ggeteceaet ceatgaggta tttetacaee geeatgteee ggeeeggeeg eggggageee cgcttcatcg cagtgggcta cgtggacgac acccagttcg tgaggttcga cagcgacgcc 60 120

gcgagtccga ggatggcgcc ccgggcgcca tggatagagc aggagggcc ggagtattgg	180
gaccgggaga cacagatete caagaccaae acacagaett accgagagag cetgeggaae	240
ctgcgcggct actacaacca gagcgaggcc gggtctcaca ccctccagag catgtacggc	300
tgcgacgtgg ggccggacgg gcgcctcctc cgcgggcatg accagtccgc ctacgacggc	360
aaggattaca tegeeetgaa egaggaeetg ageteetgga eegeggegga eaeggegget	420
cagatcaccc agegeaagtg ggaggeggec egtgaggegg ageagtggag agectacetg	480
gagggcetgt gegtggagtg geteegeaga tacetggaga aegggaagga gaegetgeag	<b>54</b> 0
cgcgcggacc ccccaaagac acatgtgacc caccaccca tctctgacca tgaggccacc	600
ctgaggtgct gggccctggg cttctaccct geggagatca cactgacctg gcagegggat	660
ggcgaggacc aaactcagga caccgagctt gtggagacca gaccagcagg agatagaacc	720
ttccagaagt gggcagctgt ggtggtgcct tctggagaag agcagagata cacatgccat	780
gtacagcatg aggggctgcc gaagcccctc accetgagat gggagccatc ttcccagtcc	840
accatececa tegtgggeat tgttgetgge etggetgtee tageagttgt ggteategga	900
gctgtggtcg ctactgtgat gtgtaggagg aagagctcag gtgga	945

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 596

60 atgegggtea eggegeeeg aacegteete etgetgetet egggageeet ggeeetgace 120 gagacetggg ceggetecea etceatgagg tatttetaea eegecatgte eeggeeegge 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagcgacg ccgcgagtcc gaggatggcg ccccgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag 360 agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag 420 aggatgtacg getgegacgt ggggccggac gggcgcctcc tccgcgggca tgaccagtcc 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg 600 agageetace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga cececeaaag acacatgtga cecaceacec catetetgac 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca tetteceagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

240

540

780

840

240

300

480 540

600

780

<210> 597

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 597

60 atgegggtea eggegeeeeg aacegteete etgetgetet egggageeet ggeeetgace 120 gagacetggg eeggeteeca etceatgagg tatttetaca eegceatgte eeggeeegge 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc gacagogacg cogogagtoc gagagaggag cogogggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacagatc tgcaagacca acacacagac ttaccgagag 360 ageetgegga acetgegegg etactacaac cagagegagg eegggtetca caccetecag 420 aggatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagtac gectaegaeg geaaagatta categeeetg aacgaggaee tgageteetg gaeegeggeg gacacggegg ctcagatcac ccagegcaag tgggaggegg cccgtgagge ggagcagetg agageetace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecace catetetgae 720 catgaggeca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca

ggagatagaa ccttccagaa gtgggcagct gtggtggtgc cttctggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteceagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 598

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 598

60 atgegggtea eggegeeeeg aacegteete etgetgetet egggageeet ggeeetgaee 120 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc 180 240 gacagegaeg cegegagtee gagagaggag cegegggege egtggataga geaggaggg 300 ccggagtatt gggaccggaa cacacagatc tgcaagacca acacacagac ttaccgagag 360 agcetgegga acetgegegg etaetacaac cagagegagg eegggtetea caccetecag aggatgtacg getgegacgt ggggeeggac gggegeetee teegegggea tgaccagtac 420 gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeggeg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 540 agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaaegggaag 600 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacee catetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 tetteceagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 960 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 599

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 599.

atgogggtca eggegeeeeg aaccgteete etgetgetet egggageeet ggeeetgace 60 gagacetggg ceggetecea etceatgagg tatttetaea eegecatgte eeggeeegge 120 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagegacg cegegagtee gaggatggeg ceeegggege catggataga geaggaggg 300 ceggagtatt gggaceggaa cacacagate tacaagacea acacacagae ttacegagag 360 agcetgegga acetgegegg etaetacaac cagagegagg eegggtetea caccetecag 420 aggatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca tgaccagtcc gcctacgacg gcaaggatta catcgccetg aacgaggacc tgagctcctg gaccgcggcg 480 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg 600 agagectace tggaggget gtgegtggag tggeteegea gatacetgga gaaegggaag 660 gagacgetge agegegega ecceecaaag acacatgtga eccaecacce catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggeaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ceaceatece eategtggge attgttgetg geetggetgt eetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

240

780

<210> 600

<211> 546

<212> DNA

<213> Homo sapiens

<400> 600	
gctcccactc catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc	60
getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg	120
cgagtccgag gatggctccc cgggcgccat ggatagagca ggaggggccg gagtattggg	180
accggaacac acagatetac aagaccaaca cacagactta ccgagagagc ctgcggaacc	240
tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct	300
gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca	360
aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc	420
agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg	480
agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	<b>540</b>
gcgcgg	546

<210> 601 <211> 1017 <212> DNA

<213> Homo sapiens

<400> 601

atgegggtea eggegeeeeg aacegteete etgetgetet egggageeet ggeeetgaee 60 gagacetggg eeggeteeca etceatgagg tatttetaca eegecatgte eeggeeegge 120 180 egeggggage eeegetteat egeagtggge taegtggaeg acaeeeagtt egtgaggtte gacagcgacg ccgcgagtcc gaggatggcg ccccgggcgc catggataga gcaggaggg 240 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag aggatgtacg getgegacgt ggggeeggae gggegeetee teegegggea tgaceagtee 420 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg 540 agagectace tggagggeet gtgcgtggae gggeteegea gatacetgga gaacgggaag 600 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacee eatetetgae catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 960 tetteceagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 602 <211> 1017 <212> DNA <213> Homo sapiens

<400> 602

atgcgggtca cggcgccccg aaccgtcctc ctgctgctct cgggagccct ggccctgacc 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagcgacg ccgcgagtcc gaggatggcg ccccgggcgc catggataga gcaggagggg ccggagtatt gggaccggaa cacacagatc tccaagacca acacacagac ttaccgagag aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccgggtctca catcatccag aggatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggta tgaccagtcc gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gaccgeggeg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg agagcetace tggagggeet gtgcgtggag tggeteegca gatacetgga gaacgggaag gagacgetge agegegegga ecceecaaag acacatgtga eccaecacce catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca

60

180

360

420

480

660

540 600

780

840 900

240

tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt gtggteateg gagetgtggt egetaetgtg atgtgtagga ggaagagete aggtgga

960 1017

<210> 603 <211> 1017 <212> DNA <213> Homo sapiens

<400> 603

60 atgegggtea eggegeeeg aacegteete etgetgetet egggageeet ggeeetgaee gagacetggg ceggetecea etceatgagg tatttetaea eegecatgte eeggeeegge 120 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 240 gacagcgacg ccgcgagtcc gaggatggcg ccccgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag agectgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag 360 aggatgtacg getgegaegt ggggeeggae gggegeetee teegegggea tgaceagtee 420 480 gcctacgacg gcaaggatta catcgcctg aacgaggacc tgagctcctg gaccgcggcg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg 540 agagectace tggaggget gtgcgtggag tegeteegea gatacetgga gaaegggaag 600 gagacgetge agegegega ecceecaaag acacatgtga eccaecacee catetetgae 660 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 tetteceagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 960 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 604 <211> 1017 <212> DNA <213> Homo sapiens

<400> 604

60 atgcgggtca cggcgcccg aaccgtcctc ctgctgctct cgggagccct ggccctgacc 120 gagacetggg ceggetecca etceatgagg tattetaca eegecatgte eeggeeegge cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 180 gacagegacg cegegagtee gaggatggeg ceeegggege catggataga geaggagggg 240 300 ccggagtatt gggaccggaa cacacagatc tccaagacca acacacagac ttaccgagag agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caecetecag 360 420 aggatgtacg getgegacgt ggggceggac gggcgcetec teegegggea tgaccagtee 480 gectaegaeg geaaggatta categeeetg aacgaggaee tgageteetg gaeegeggeg 540 gacacggegg etcagatcac ccagegcaag tgggaggegg eccgtgagge ggagcagtgg 600 agageetace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacee catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 605

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 605

atgegggtea eggegeeeeg aacegteete etgetgetet egggageeet ggeeetgace	60
gagacetggg ceggetecca etteatgagg tatttetaea eegecatgte eeggeeegge	120
cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgaggttc	180
gacagcgacg ccgcgagtcc gaggatggcg ccccgggcgc catggataga gcaggagggg	240
ccggagtatt gggaccggga gacacggaac atgaaggcct ccgcgcagac ttaccgagag	300
aacctgegga tegegeteeg etactacaac cagagegagg eegggtetea caettggeag	360
aggatgtatg gctgcgacct ggggccggac gggcgcctcc tccgcgggca tgaccagtcc	420
gectaegaeg geaaggatta categeeetg aacgaggaee tgageteetg gaeegeggeg	480
gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg	540
agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaaegggaag	600
gagacgetge agegegegga ecceecaaag acacatgtga eccaecace catetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca	900
tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 9	60
gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga	1017

<211> 1017 <212> DNA

<213> Homo sapiens

<400> 606

atgcgggtca cggcgcccg aaccgtcctc ctgctgctct cgggagccct ggccctgacc 60 gagacetggg ceggetecea etceatgagg tatttetaea eegecatgte eeggeeegge 120 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 240 gacagcgacg ccgcgagtcc gaggatggcg ccccgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggga gacacggaac atgaaggcct ccgcgcagac ttaccgagag 360 aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccgggtctca caccctccag 420 aggatgtacg getgegacgt ggggeeggac gggegeetee teegegggta ceaecaggae gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 540 600 agagectace tggaggget gtgegtggag tggeteegea gatacetgga gaaegggaag 660 gagacgetge agegeggga cececcaaag acacatgtga cecaccacce catetetgae catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 607

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 607

60 atgcgggtca cggcgcccg aaccgtcctc ctgctgctct cgggagccct ggccctgacc 120 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacagatc tgcaagacca acacacagac ttaccgagag 300 agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag 360 420 aggatgtacg getgegacgt ggggeeggae gggegeetee teegegggea tgaccagtee 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 600 agagcctacc tggagggcct gtgcgtggag tggctccgca gatacctgga gaacgggaag

gagacgetge agegegegga ecceccaaag acacatgtga eccaccace catetetgae 660 catgaggea ecctgaggtg etgggeetg ggettetace etgeggagat cacactgace 720 tggcageggg atggegaga ecaaacteag gacacegage ttgtggagae eagaceagea 840 tacacatgee atgtacagea tgaggggetg eegaageee teaceetgag atgggageea 900 tetteceagt eaceateee categtggge attgttgetg geetggetgt eetageagtt 960 gtggteateg gagetgtggt egetactgtg atgtgtagga ggaagagete aggtgga 1017

<210> 608

<211> 1017 <212> DNA

<213> Homo sapiens

<400> 608

60 atgegggtea eggegeeeg aaccgteete etgetgetet egggageeet ggeeetgaee 120 gagacetggg ceggetecea etceatgagg tatttetaea eegecatgte eeggeeegge 180 egeggggage ecceetteat egeagtggge taegtggaeg acaeceagtt egtgaggtte 240 gacagegaeg cegegagtee gaggatggeg ceeegggege catggataga geaggaggg ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 300 360 agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag 420 aggatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca tgaccagtcc gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gaccgeggeg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg 540 agageetace tggagggeet gtgegtggae gggeteegea gatacetgga gaacgggaag 600 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacee catetetgae 660 catgaggeca ccetgaggtg etgggecetg ggettetace etgeggagat cacaetgace 720 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge tttetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca tetteceagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 960 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 609

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 609

60 atgegggtea eggegeeeg aacegteete etgetgetet egggageeet ggeeetgaee gagacctggg ccgctccca ctccatgagg tatttctaca ccgccatgtc ccgcccggc 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 180 240 gacagegacg cegegagtee gaggatggeg ceeegggege catggataga geaggaggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 agcetgegga acetgegegg etaetacaac eagagegagg eegggtetea eateateeag aggatgtatg getgegacet ggggecegae gggegeetee teegegggea tgaceagtee 420 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gaeegeggeg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 agagectace tggaggget gtgcgtggag tggeteegea gatacetgga gaacgggaag 600 660 gagacgetge agegegegga ecceecaaag acacaegtga eccaecaece egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ceaceatece eategtggge attgttgetg geetggetgt eetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<211> 1017 <212> DNA

<213> Homo sapiens

<400> 610

60 atgegggtea eggegeeeg aacegteete etgetgetet egggageeet ggeeetgaee 120 gagacetggg ceggetecea etceatgagg tatttetaea eegecatgte eeggeeegge cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 180 gacagegaeg cegegagtee gaggatggeg ceeegggege catggataga geaggagggg 240 300 ccggagtatt gggaccggaa cacacagatc tgcaagacca acacacagac ttaccgagag agcetgegga acetgegegg etactacaac eagagegagg eegggtetea eateateeag 360 aggatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggta tgaccagtcc 420 gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeggeg 480 540 gacacggegg ctcagatcac ccagcgcaag tgggaggegg cccgtgaggc ggagcagctg agageetace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag 600 gagacgetge agegegega ecceecaaag acacatgtga eccaecace eatetetgae 660 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agageagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 960 tetteceagt ceaceatece eategtggge attgttgetg geetggetgt eetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 611 <211> 1017

<212> DNA

<213> Homo sapiens

## <400> 611

60 atgegggtea eggegeeeg aacegteete etgetgetet egggageeet ggeeetgaee 120 gagacetggg eeggeteeca etecatgagg tatttetaca eegceatgte eeggeeegge 180 egeggggage eeegetteat eteagtggge taegtggaeg acaegeagtt egtgaggtte 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggaggg 300 ccggagtatt gggaccggaa cacacagatc tgcaagacca acacacagac ttaccgagag 360 aacetgegga tegegeteeg etaetacaac cagagegagg eegggtetea caccetecag 420 aggatgtacg getgegacgt ggggceggac gggcgcetee teegegggca tgaccagtee 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 600 agageetaee tggagggeet gtgegtggag tggeteegea gataeetgga gaaegggaag 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacee catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca tetteceagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 960 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 612

<211> 546

<212> DNA

<213> Homo sapiens

## <400> 612

geteceaete eatgaggtat tetacaeeg eeatgteeeg geeeggeege ggggageeee 60 120 egagteegag gatggeeee egggegeeat ggatagagea ggagggeeg gagtattggg acegggagae acagatetee aagaceaaea eacagaetta eegagagaae etgeggateg egeteegeta etacaaeeag agegaggeeg ggteteaeae eeteeagagg atgtaeeget 300

aggattacat cgccetgaac gaggacetga geteetggac egeggeggac aeggeggete 420 agateaceca gegeaagtgg gaggeggee gtgaggegga geagtggaga geetacetgg agggeetgtg egtggagtgg eteegeagat aeetggagaa egggaaggag aegetgeage 540 gegegg
---

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 613

60 atgegggtea eggegeeeg aacegteete etgetgetet egggageeet ggeeetgaee 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 180 gacagegacg cegegagtee gaggatggeg ceeegggege catggataga geaggaggg 240 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag agectgegga acetgegegg etactacaac cagagegagg eegggtetea cateatecag 360 aggatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggta tgaccagtcc 420 geetacgacg geaaggatta categeeetg aacgaggace tgageteetg gaeegeggeg 480 **540** gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg agagcctacc tggagggcct gtgcgtggag tggctccgca gatacctgga gaacgggaag 600 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacce catetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 ggagatagaa ccttccagaa gtgggcagct gtggtggtgc cttctggaga agagcagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 tetteccagt ceaccatece categtggge attgttgetg geetggetgt cetageagtt 960 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 614

<211> 529

<212> DNA

<213> Homo sapiens

<400> 614

60 gaggtatttc tacaccgcca tgtcccggcc cggccgcggg gagccccgct tcatcgcagt 120 gggetacgtg gacgacaccc agttcgtgag gttcgacagc gacgccgcga gtccgaggat ggcgccccgg gcgccatgga tagagcagga ggggccggag tattgggacc gggagacaca 240 gatetecaag accaacacae agaettaceg agagageetg eggaacetge geggetaeta 300 caaccagage gaggeegggt ctcacaccct ecagaggatg tttggetgeg acgtggggee 360 ggacgggege etceteegeg ggeatgacea gteegeetae gacggeaagg attacatege 420 cetgaacgag gacetgaget cetggacege ggeggacaeg geggetcaga teacceageg 480 caagtgggag gcggcccgtg aggcggagca gtggagagcc tacctggagg gcctgtgcgt ggagtggctc cgcagatacc tggagaacgg gaaggagacg ctgcagcgc

180

529

<210> 615

<211> 895

<212> DNA

<213> Homo sapiens

<400> 615

60 atgcgggtca cggcgcccg aaccgtcctc ctgctgctct cgggagccct ggccctgacc 120 180 egeggggage ecceetteat egeagtggge taegtggaeg acacceagtt egtgaggtte 240 gacagcgacg ccgcgagtcc gaggatggcg ccccgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggga gatacagatc tccaagacca acacacagac ttaccgagag

agcetgegga acetgegegg ctactacaac cagagegagg cegggtetea caccetecag	<b>36</b> 0
aggatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca tgaccagtcc	420
gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg	480
gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg	540
agagectace tggaggget gtgegtggag tggeteegea gatacetgga gaacgggaag	600
gagacgetge agegegega ecceecaaag acacatgtga eccaecace catetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atggg	895

<211> 895

<212> DNA

<213> Homo sapiens

## <400>

atgegggtea eggegeeeg aacegteete etgetgetet egggageeet ggeeetgaee 60 gagacetggg ceggetecca etceatgagg tatttetaca cegecatgte eeggeeegge 120 egeggggage ecceptteat etcagtggge taegtggaeg acaegcagtt egtgaggtte 180 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag 360 aggatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca tgaccagtcc 420 gectaegaeg geaaggatta eategeeetg aaegaggaee tgageteetg gaeegeggeg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg agagcctacc tggagggcct gtgcgtggag tggctccgca gatacctgga gaacgggaag gagacgetge agegegega ecceecaaag acacatgtga eccaecacee catetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atggg 895

<210> 617

<211>  $529 \cdot$ 

<212> DNA

<213> Homo sapiens

## <400> 617

gaggtatttc tacaccgcca tgtcccggcc cggccgcggg gagccccgct tcatcgcagt gggctacgtg gacgacaccc agttcgtgag gttcgacagc gacgccgcga gtccgaggat ggcgccccgg gcgccatgga tagagcagga ggggccggag tattgggacc gggagacaca gatetecaag accaacacae agaettaceg agagageetg eggaacetge geggetaeta caaccagage gaggeeggt etcacaccet ecagaggatg taeggetgeg aegtggggee ggacgggcgc ctcctccgcg ggcataacca gtacgcctac gacggcaagg attacatcgc cctgaacgag gacctgaget cctggaccgc ggcggacacg gcggctcaga tcacccagcg caagtgggag gcggcccgtg aggcggagca gtggagagcc tacctggagg gcctgtgcgt ggagtggctc cgcagatacc tggagaacgg gaaggagacg ctgcagcgc

<210> 618

<211> 533

<212> DNA

<213> Homo sapiens

<400> 618

gaggtatttc tacaccgcca tgtcccggcc cggccgcggg gagccccgct tcatcgcagt gggctacgtg gacgacaccc agttcgtgag gttcgacagc gacgccgcga gtccgaggat 240

300

540

600

780

840

60

120

240 300

360

420

480

529

ggcgccccgg gcgccatgga tagagcagga ggggccggag tattgggacc ggaacacaca gatctccaag accaacaca agacttaccg agagagcctg cggaacctgc gcggctacta caaccagage gaggccggt ctcacaccct ccagaggatg tacggctgcg acgtggggcc ggacgggcgc ctcctccgcg ggtatgacca gtccgcctac gacggcaagg attacatcgc cctgaacgag gacctgaget cctggaccgc ggcggacacg gcggctcaga tcacccagcg caagtgggag gcggcccgtg tggcggagca gctgagagcc tacctggagg gcctgtgcgt ggagtggctc cgcagatacc tggagaacgg gaaggagacg ctgcagcgc cgg	180 240 300 360 420 480 533
<210> 619	

<211> 546

<212> DNA

<213> Homo sapiens

<400> 619

geteceacte catgaggtat ttetacaceg ceatgteecg geceggeege ggggageece 60 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg 120 cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtctggct 300 gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca 360 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

180

240

480

540

60

120 180

360

420

240 300

480

180

240

480

540

**546** 

<210> 620

<211> 546

<212> DNA

<213> Homo sapiens

<400>

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetec aagaceaaca cacagactta ccgagagage etgcggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gegaegtggg geeggaeggg egeeteetee gegggeatga ceagteegee taegaeggea aggattacat cgccetgaac gaggacetgc getcetggac cgccgcggac aaggeggete agateaceca gegeaagtgg gaggeggee gtgaggegga geagtggaga geetacetgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

540 **546** 

<210> 621

<211> 546

<212> DNA

<213> Homo sapiens

<400> 621

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee 60 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg 120 cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 300 360 gcgacetggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc

420 480

540

**546** 

546 gcgcgg <210> 622 <211> 546 <212> DNA <213> Homo sapiens <400> 622 60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece 120 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg 180 240 accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagacg atgtacggct 360 gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc 480 agateaceca gegeaagtgg gaggeggeee gtgaggegga geagtggaga geetaeetgg **540** agggeetgtg egtggagtgg etcegeagat acetggagaa egggaaggag aegetgeage 546 gcgcgg <210> 623 <211> 546 <212> DNA <213> Homo sapiens <400> 623 60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece 120 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg 180 240 accgggagac acagatetee aagaceaaca cacagaetta eegagagaac etgegeaccg 300 egeteegeta etacaaceag agegaggeeg ggteteacat cateeagagg atgtatgget gcgacgtggg gccggacggg cgcctcctcc gcgggtatga ccagtccgcc tacgacggca 360 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc 480 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg 540 agggeetgtg egtggagtgg etcegeagat acetggagaa egggaaggag aegetgeage 546 gcgcgg 624 <210> <211> 546 <212> DNA <213> Homo sapiens <400> 624 60 geteceaete catgaggtat ttetaeaeeg ceatgteeeg geeeggeege ggggageeee 120 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg 180 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accggaacac acagatetge aagaccaaca cacagaetta eegagagage etgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct

gegaegtggg geeggaeggg egeeteetee gegggeatga eeagtaegee taegaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egeggeggae aeggeggete

agatcaccca gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetacetgg

agggeetgtg egtggagtgg etcegeagae acetggagaa egggaaggag aegetgeage

<210> 625 <211> 546

gcgcgg

<212> DNA

### <213> Homo sapiens

<400> 625

. 60 gctcccactc catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetec aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg agggeetgtg egtggagtgg etcegeagae acetggagaa egggaaggag aegetgeage gcgcgg

546

<210> 626

<211> 546

<212> DNA

<213> Homo sapiens

<400> 626

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gatggcgccc cgggcgccat ggatagagca ggagggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca aggattacat egecetgaac gaggacetga geteetggae egeggeggae aeggeggete agatcaccca gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetacetgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

300 360 420

480

540 546

<210> 627

<211> 546

<212> DNA

<213> Homo sapiens

<400> 627

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetec aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

60 120 180

240

300 360

420

480 540

546

<210> 628

<211> 546

<212> DNA

<213> Homo sapiens

<400> 628

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg 60 120

	•
accgggagac acagatetec aagaceaaca cacagaetta eegagagage etgeggaace tgegeggeta etacaaceag agegaggeeg ggteteacac ttggeagaeg atgtatgget gegacetggg geeggaeggg egeeteetee gegggeataa eeagttagee tacgaeggea aggattacat egeeetgaac gaggaeetga geteetggae egeggeggae accgeggete agateaceea gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetacetgg agggeaegtg egtggagtgg eteegeagat acetggagaa egggaaggag acgetgeage gegegg	240 300 360 420 480 540 546
<210> 629	
<211> 546	
<212> DNA	
<213> Homo sapiens	
<400> 629 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggacgaca eccagttegt gaggttegae agegacgeeg egagteegag gatggeeee egagteegag gatggeeee egagteegag gatggeeee egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagaatetee aagaceaaca cacagaetta eegagaggae etgeeggaeee tgeteegeta etacaaceag agegaggeeg ggteteacac eetecagagg atgtaeeget gegacgtggg geeggaeggg egeeteetee gegggeatga ecagteegee tacgaeggea aggattacat egeeetgaae gaggaeetga geteetggae egegeggee agateaceea gegeaagtgg gaggeggeee gtgaggegga geagtggaga geetacetgg agggeetgtg egtggagtgg eteegeagat acetggagaa egggaaggag acgetgeage geegegg	60 120 180 240 300 360 420 480 540 546
<210> 630 <211> 546	
<211> 546 <212> DNA	
<213> Homo sapiens	
<400> 630 geteceaete catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaca eccagttegt gaggttegae agegaegeeg egagteegag gatggegeee egggeeat ggatagagea ggaggggeeg gagtattggg aceggaacae acagatetge aagaceaaca eacagaetta eegagagge etgeggaace tgeegegeta etacaaceag agegaggeeg ggteteaeat eatecagagg atgtatgget gegaegtggg geeggaeggg egeeteetee gegggtatga ecagteege tacgaeggea aggattacat egeeetgaac gaggaeetga geteetggae egegeggee agatacacea gegeagtgg gaggeegeee gtgaggegga geagetgag geetacetgg	
agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	540
gcgcgg	546
<210> 631 <211> 546 <212> DNA <213> Homo sapiens	
<400> 631	
geteceaete catgaggtat tetacaceg ceatgteeeg geeggeege ggggageeee geteatege agtgggetae gtggacgaca eccagttegt gaggttegae agegaegeeg egagteegag gatggegeee egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegagagage etgeggaaee tgegeggeta etacaaceag agegaaggeeg ggteteacae eetecagage atgtaegget gegaegtggg geeggeeggeeggeeggeatga eegggeggea aggattacat egeeetgaae gaggaeetga geteetggae egggeggee aggattacat egeeetgaae gaggaeetga geteetggae egggeggee aggaeggeete agateaceea gegeaagtgg gaggeggeee gtgaggegga geagtggaga geetacetgg	60 120 180 240 300 360 420 480
agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	<b>540</b>

gcgcgg	546
<210> 632 <211> 619 <212> DNA <213> Homo sapiens	
<400> 632 atgeggtea eggegeeeeg aacegteete etgetgetet egggageeet ggagacetggg eeggeteea etceatgagg tatttetaca eegcatgte eegeggggage eegetteat egeagtggge taegtggaeg acaceagtt gacagegaeg ecacgagtee gaggaaggag eegegggege eatggata eeggagtatt gggacegga gacacagate tecaagacea acacacaga ageetgegga acetgeggg etactacaac eagagegagg eegggtete aggatgtacg getgegaegt ggggeegae gggegeetee teegeggge geetacgaeg geaaggatta eategeeetg aacgaggaee tgageteetg gacacggegg eteagatca eacgegeaag tgggaggeg eegtgag agageetaee tgageteetg gacacggegg eteagatcae eagegeaag tgggaggegg eegtgag agageetaee tggagggeet gtgegtggag tggeteega gagacetge agegeegg	eeggcccggc 120 cgtgaggttc 180 ga gcaggagggg 240 ac ttaccgagag 300 a caccetccag 360 a tgaccagtcc 420 g gaccgcgcg 480 gc ggagcagtgg 540
<210> 633 <211> 546 <212> DNA <213> Homo sapiens	
<400> 633 geteceaete catgaggtat ttetacaceg ceatgteeg geeeggeege getteatete agtgggetae gtggaegaea egeagttegt gaggttegae egagteegag agaggageeg egggegeegt ggatagagea ggaggggaecegggagae acegggagae acagatetee aagaceaaea cacagaetta eegagaga tgegeggeta etacaaceag agegaggeeg ggteteaeae eeteeagag gegaegtggg geeggaeggg egeeteetee gegggeatga eeagteege aggattacat egeeetgaae gaggaeetga geteetggae egeggggaagateaeeea gegeaagtgg gaggeggeee gtgaggegga geageggaaggeggagtg egtggagtgg eteegeagat acetggagaa egggaagggeggggeegg	agcgacgccg 120 ccg gagtattggg 180 gc ctgcggaacc 240 g atgtacggct 300 tacgacggca 360 c acggcggctc 420 ga gcctacctgg 480
<210> 634 <211> 546 <212> DNA <213> Homo sapiens	
<400> 634 geteceaete catgaggtat ttetacaceg ceatgteeg geceggeege getteatege agtgggetae gtggaegaea eccagttegt gaggttegae egagteegag gatggegee egggegeeat ggatagagea ggaggggee accgggagae acagatetee aagaceaaea cacagaetta eegagaga tgegeggeta etacaaceag agegaggeeg ggteteaeae eetecagag gegacgtggg geceggaegggeeggeegggeegggeegggeeggge	agcgacgccg 120 cg gagtattggg 180 gc ctgcggaacc 240 g atgtacggct 300 c tacgacggca 360 c accgcggctc 420 ga acctacctgg 480

<210> 635 <211> 546 <212> DNA

<213> Homo sapiens

<400> 635

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee 60 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg 120 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 180 accgggagac acagatetee aagaceaaca cacggaetta eegagagage etgeggaace 240 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 360 gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc 420 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacctgg 480 agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 gcgcgg 546

<210> 636

<211> 546

<212> DNA

<213> Homo sapiens

<400> 636

geteceaete catgaggtat ttetacaecg ceatgteecg geeeggeege ggggageece getteatege agtgggetae gtggacgaca eccagttegt gaggttegae agegaegeeg egagteegag gatggegeec egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegaggage etgeeggaaec tgeegegeta etacaaecag agegaggeeg ggteteaeae eetecagagg atgtaegget gegaegtegg geeggaegge egeeteetee gegggeatga eeagteegee taegaeggea aggattaeat egeeetgaae gaggaeetga geteetggae eeggeggee aggeeggee aggeeggee gtgaggegga geagtggaa geetaeetgg aggeeaegte egtggagtgg eteegeagat acetggagaa egggaagga geetaeetgg agggeaegtg egtggagtgg eteegeagat acetggagaa egggaaggag acgetgeage geeggg

<210> 637

<211> 546

<212> DNA

<213> Homo sapiens

<400> 637

geteceaete catgaggtat ttetacaeeg ceatgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggacgaea egeagttegt gaggttegae agegaegeeg egagteegag agaggageeg egggeeegt ggatagagea ggaggggeeg gagtattggg aceeggaaeae acagatetge aagaceaaea eacagaetta eegaggagge etgeggaaee tgegeggeta etacaaeeag agegaggeeg ggteteaeae eeteeagagg atgtaeegget gegaegtggg geeggaeggeeggeeggeatga eeagteegee tacgaeggea aggataeat egeeetgaae gaggaeetga geteetggae egeggeggae aeggeggee agateaeeea gegeaagtgg gaggeggeee gtgtggegga geaggaeaga geetaeetgg agggeetgtg egtggagtgg eteegeagat acetggagaa egggaaggag aegetgeage geggg

540 546

 $\frac{60}{120}$ 

180

240 300

360

420

60

120

300

360

420

480

 $\frac{180}{240}$ 

480

540

546

<210> 638

<211> 619

<212> DNA

<213> Homo sapiens

<400> 638

atgegggtea eggegeeeg aacegteete etgetgetet egggageeet ggeeetgace gagacetggg eeggeteeea etceatgagg tatttetaca eegceatgte eeggeeegge

cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc	180
gacagegacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg	240
ccggagtatt gggaccggaa cacacagatc tgcaagacca acacacagac ttaccgagag	300
agcetgegga acetgegegg etactacaac cagagegagg eegggtetca caccetecag	360
aggatgtacg getgegaegt ggggceggae gggegeetee teegegggea tgaceagtee	420
gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeggeg	480
gacacggegg ctcagatcac ccagegcaag tgggaggegg cccgtgtggc ggagcagetg	<b>54</b> 0
agagcetace tggagggcga gtgcgtggag tggeteegca gatacetgga gaacgggaag	600
gagacgctgc agcgcgcgg	619

<210> 639

<211> 619

<212> DNA

<213> Homo sapiens

<400> 639

60 atgcgggtca cggcgccccg aaccgtcctc ctgctgctct cgggagccct ggccctgacc gagacetggg eeggeteeca etceatgagg tatttetaca eegecatgte eeggeeegge 120 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc 180 gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggaggg 240 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 300 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 360 aggatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca tgaccagtcc 420 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg 540 agagectace tggagggeet gtgcgtggag tggeteegea gatacetgga gaacgggaag 600 gagacgctgc agcgcgcgg 619

<210> 640

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 640

atgcgggtca cggcgccccg aaccgtcctc ctgctgctct cgggagccct ggccctgacc 60 gagacetggg ceggetecea etceatgagg tatttetaea eegecatgte eeggeeegge 120 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc 180 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ceggagtatt gggaceggga gacacagate tecaagacea acacacagae ttacegagag agectgegga acctgegegg etactacaac eagagegagg eegggtetea eacceteeag 360 420 aggatgtacg getgegaegt ggggeeggae gggegeetee teegegggea tgaceagtee 480 gcetacgacg gcaaggatta categecetg aacgaggace tgageteetg gaeegeggeg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg agageetace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacce catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagatagaa ccttccagaa gtgggcagct gtggtggtgc cttctggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ceaccatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

240

300

540 600

780

840

<210> 641

<211> 1017

<212> DNA

<213> Homo sapiens

<40	)()>	641	٠

60 atgegggtea eggegeeeeg aacegteete etgetgetet egggageeet ggeeetgaee gagacetggg ceggetecea etceatgagg tatttetaca eegecatgte eeggeeegge 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 180 gacagegaeg cegegagtee gaggatggeg ceeegggege catggataga geaggaggg 240 ccggagtatt gggaccggaa cacacagatc tccaagacca acacacagac ttaccgagag 300 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 360 agcatgtacg getgegaegt ggggeeggae gggegeetee teegegggta tgaceagtee 420 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 agagcctacc tggagggcct gtgcgtggag tggctccgca gatacctgga gaacgggaag 600 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacee catetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 tetteceagt ceaceatece categtggge attgttgetg geetggetgt eetageagtt 960 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 642

<211> 546

<212> DNA

<213> Homo sapiens

### <400>

geteceacte catgaggtat ttetacaceg ceatgteeeg geceggeege ggggageece 60 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg 120 cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatette aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 300 gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca 360 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc 420 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg agggcetgtg egtggagtgg etcegeagat acetggagaa egggaaggag aegetgeage gcgcgg

180

240

480

540

546

<210> 643

<211> 615

<212> DNA

<213> Homo sapiens

### <400> 643

gggtcacggc gccccgaacc gtcctcctgc tgctctcggg agccctggcc ctgaccgaga 60 cctgggccgg ctcccactcc atgaggtatt tctacaccgc catgtcccgg cccggccgcg 120 gggagccccg cttcatcgca gtgggctacg tggacgacac ccagttcgtg aggttcgaca 180 gcgacgccgc gagtccgagg atggcgcccc gggcgccatg gatagagcag gaggggccgg 240 agtattggga ccgggagaca cagatctcca agaccaacac acagacttac cgagtgaacc 300 tgcggaacct gcgcggctac tacaaccaga gcgaggccgg gtctcacacc ctccagagga 360 tgtacggctg cgacgtgggg ccggacgggc gcctcctccg cgggcatgac cagtccgcct 420 480 acgacggcaa ggattacatc gccctgaacg aggacctgag ctcctggacc gcggcggaca cggcggctca gatcacccag cgcaagtggg aggcggcccg tgaggcggag cagtggagag 540 cctacctgga gggcctgtgc gtggagtggc tccgcagata cctggagaac gggaaggaga 600 cgctgcagcg cgcgg 615

<210> 644

<211> 619

<212> DNA

### <213> Homo sapiens

# <400>

60 atgegggtea eggegeeeg aacegteete etgetgetet egggageeet ggeeetgaee gagacetggg eeggeteeca etecatgagg tatttetaca eegceatgte eeggeeegge 120 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagcgacg ccgcgagtcc gaggatggcg ccccgggcgc catggataga gcaggagggg 240 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 300 agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag 360 aggatgtacg getgegacgt ggggccggac gggegeetee teegegggea taaceagtte 420 480 gectacgaeg geaaggatta categeeetg aacgaggaee tgageteetg gaeegeggeg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg 540 600 agagectace tggaggget gtgetggag tggeteegea gatacetgga gaaegggaag gagacgctgc agcgcgcgg 619

<210> 645

<211> 546

<212> DNA

<213> Homo sapiens

# <400> 645

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee 60 getteatege agtgggetae gtggaegaea eccagttegt gaggtteaae agegaegeeg 120 cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagae acagatetee aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 300 gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca 360 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc 420 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 646

<211> 546

<212> DNA

<213> Homo sapiens

# <400> 646

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece 60 120 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accgggagac acagatetee aagaceaaca cacagactga eegagagage etgeggaace tgegeggeta etacaaccag agegaggeeg ggteteacae eetecagagg atgtaegget 300 gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca 360 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc agateaceca gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetaeetgg 480 agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 gcgcgg

<210> 647

<211> 546

<212> DNA

Homo sapiens <213>

# <400> 647

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg 60 120

180

240

480

540 546

180

cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accgggagac acagatctcc aagaccaaca cacagactta ccgagagagc ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct gcgacctggg gcccgacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg	180 240 300 360 420 480 540 546
,	
<210> 648	
<211> 546	
<212> DNA	
<213> Homo sapiens	
<400> 648	
geteceaete eatgaggtat ttetacaeeg ceatgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaea eecagttegt gaggttegae agegaegeeg egagteegag gatggegeee egagteegag gatggegeee egagteegaggagee gagtattggg acegggagae acagatetee aagaceaaea eacagaetta eegagaggee gagtattggg acegggeta etacaaeeag agegaggeeg ggteteaeae eetecagagg atgtaegget gegaegtggg geeggaeggg egeeteetee geggeatga eeagtaegee tacgaeggea aggattaeat egeeetgaae gaggaeetga geteetggae eeggeggee aeggeggee aagattaeat egeeetgaae gaggaeetga geteetggae egeggegee aggaeetgg gaggeggee gtgaggegga geagtggaga geetaeetgg aggeetgtg egtggagtgg eteegeagat acetggagaa egggaaggag acgetgeage geegeg	60 120 180 240 300 360 420 480 540 546
<210> 649	
<211> 546	
<212> DNA	
<213> Homo sapiens	
<400> 649	
geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece	60
getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg egagteegag agaggaegee egggeeegt ggatagagea ggagggeeg gagtattggg aceggaacae acagaetete aagaceaaea eacagaetta eegaggagee etgeggaaee tgegeggeta etacaaeeag agegaggeeg ggteteaeae eeteeagagg atgtaegget gegaegtggg geeggaeggg egeeteetee gegggeatga eeagteegee taegaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egegeggee aggaeteaeea gagtaeaeea gaggaeetga geteetggae egegeggee aggeeggee aggeeggeee gtgaggegga geagetgaga geetaeetgg agggeetgt egggeetgt egtggagtgg eteeggaatga eegggaaggag aegetgeeggaaggeetgggeegg	120 180 240 300 360 420 480 540 546
<210> 650 <211> 546 <212> DNA <213> Homo sapiens	
<400> 650 geteceaete catgaggtat ttetacaeeg ceatgteeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg egagteegag gatggegeee egggegeeat ggatagggea gagggggeeg gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegaggagee etgeggaaee tgegeggeta etacaaeeag agegaggeeg ggteteaeae eeteeagagg atgtaegget gegaegtggg geeggeeggeeggeeggeatga eeggeggea aggattaeat egeeetgaae gaggaeetga geteetggae egegeggeae aeggeggete agateaeeca gegeaagtgg gaggeggeee gtgaggegga geageggaa geetaeetgg	60 120 180 240 300 360 420 480

agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg	540 546
<210> 651 <211> 1017 <212> DNA <213> Homo sapiens	
atgeggtea eggegeeeg aacegteete etgetgetet eggageeet ggeeetgaee gagacetggg eeggeteea etceatgagg tatttetaca eegecatgte eeggeggge eegggggage eeggeteeta egeagtggge taegtggaeg acacecagt egtgaggte gacagegagg eegggtee gaggatgge eeeggggge eatggatgag eegggtetea eacecteeag aggatgte gacagegag eegggtete gacagegag eegggtetea eacecteeag aggatgtatt gggacegga gacacagate tgeaagacea acacacagae ttaeegagag ageetgegga acetgeggg etactacaac eagagegagg eegggtetea eacecteeag aggatgtaeg getgegaegt ggggeeggae gggegeetee teegeggga tgaceagtee geetacgaeg geaaggatta eategeeetg aacgaggaee tgageteetg gacegeggg gacaeggegg etcagateac eeageeaag tgggaggegg eeegtgagge ggageagtgg agageetaee tggagggeet gtgegtggag tggeteegaa gaaegggaag gagaegetge agegeggga eeececaaag acacatgga eeaaceggaag gagaegete agegeggga eeececaaag acacatgtga eeaacetgaee tggeagegg atggeggga eeaaacteag gacacegage ttgtggagae eagaeagaga tacacatgee atgtacagaa gtgggeaget gtggtggtge ettetgagaa agageagaga tacacatgee atgtacagea tgagggeet eegaageee tetetggaga atgggageea tetteeagaa gtgggeaget gegaageee tetetggaga atgggageea tetteeagaa gtgggeaget gegaageee teeteegaga atgggageea tetteeeagt eeaceateee eategtgge attgttgetg geetggetgt eetageagtt gtggteetaee gegggtet eetageagtt gtggteetaeegggt eetageagtt gtggtegte eetageagtt gtggtgeea tetteeeaga atgggageea tetteeeagt eeaceateee eategtgge attgttgetg geetggetgt eetageagtt gtggtgteatee gaggtgga eagatggga eategtggagaagagaa	60 120 180 240 300 360 420 480 540 600 660 720 780 840 900 60 1017
<210> 652 <211> 546 <212> DNA <213> Homo sapiens <400> 652 geteceactt catgaggtat ttetacaceg ceatgteeg geeggeege ggggageee getteatege agtggetae gtggaegaea egeagttegt gaggttegae agegaegeeg egagteegag gatggegee egggegeed ggatagagaa ggagggeeg gagtattggg acegggagae aeggaacatg aaggeeteeg egeagaetta eegagagaae etgeggateg egeteegeta etacaaceag agegaggeeg ggteteacac ttggeagagg atgtatgget gegacetggg geeggaegge egeeteetee geggeatga eeggeggae aeggegea aggattaeat egeetgaae gaggaeetga geteetggae egeggegee aggataeate egeetgaae gaggaete aggataeate egeetgaae gaggaeteg gaggeggee gggeggae aeggeggete agateacea geacaagtgg gaggeggeee gtgaggegga geagetgaga geetaeetgg aggeetgtg egtggagtgg eteegeagat acetggagaa egggaaggag aegetgeage gegegg	60 120 180 240 300 360 420 480 540 546
<210> 653 <211> 822 <212> DNA <213> Homo sapiens <400> 653 geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggacgaca cecagttegt gaggttegae agegacgeeg egagteegag agaggageeg egggeegt ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaca cacagaetta eegaggagee etgeggaace tgegeggeta etacaaceag agegaggeeg ggteteacac eetecagage atgtaegget gegacgtggg geeggaeggg egeeteetee gegggeatga ceagteegee tacgaeggea aggattacat egceetgaac gaggaeetga geteetgga eegeggeac aeggeggete	60 120 180 240 300 360 420

agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcggaccc cccaaagaca catgtgaccc accaccccat ctctgaccat gaggccaccc tgaggtgctg ggccctgggc ttctaccctg cggagatcac actgacctgg cagcgggatg gcgaggacca aactcaggac accgagcttg tggagaccag accagcagga gatagaacct tccagaagtg ggcagctgtg gtggtgcctt ctggagaaga gcagagatac acatgccatg tacagcatga ggggctgccg aagcccctca ccctgagatg gg	480 540 600 660 720 780 822
<210> 654	
<211> 546	
<212> DNA	
<213> Homo sapiens	
<400> 654	
geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece	60
getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg	120
cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg	$\begin{array}{c} 180 \\ 240 \end{array}$
accgggagac acagatetee aagaceaaca cacagaetta ccgagagage etgeggaace tgeggggeta etacaaceag agegaggeeg ggteteacae eetecagagg atgtaegget	300
gegacgtggg geeggacggg egeeteetee gegggeatga ceagteegee taegacggea	360
aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc	420
agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga acctacctgg	480
agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	540
gcgcgg	546
<210> 655	
<211> 546	
<212> DNA <213> Homo sapiens	
Tioms suprems	
<400> 655	CO
geteceacte catgaggtat ttetacaceg ceatgteeg geeeggeege ggggageece getteatege agtgggetae gtggaegaea eecagttegt gaggttegae agegaegeeg	60 120
cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg	180
accgggagac acagatetec aagaceaaca cacagactga cegagagage etgeggaace	240
tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct	300
gegacgtggg geeggacggg egeeteetee gegggeatga ceagteegee taegaeggea	360
aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc	420
agatcaccca gcgcaagtgg gaggcggcc gtgaggcgga gcagtggaga gcctacctgg	480 540
agggeetgtg egtggagtgg etcegeagat acetggagaa egggaaggag aegetgeage gegegg	540 546
6~6~66	0.10
<210> 656	
<211> 822	
<212> DNA	
<213> Homo sapiens	
<400> 656	
geteceacte catgaggtat ttccacacet cegtgteeeg geeeggeege ggggageece	60
getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg	120
cgagtccgag gatggcgccc cgggcgccat ggatagagca ggagggccg gagtattggg	180
accgggagac acagatetee aagaceaaca cacagaetta cegagagage etgeggaace	240 300

tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct

gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc

agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg

 ${\tt agggcctgtg} \ {\tt cgtggagtgg} \ {\tt ctccgcagat} \ {\tt acctggagaa} \ {\tt cgggaaggag} \ {\tt acgctgcagc}$ 

300

360

420

480

gegeggacce eccaaagaca catgtgacce accaecceat etetgaceat gaggecacce tgaggtgetg ggeeetggge ttetaceetg eggagateae actgacetgg eagegggatg gegaggacca aacteaggae accgagettg tggagaccag accageagga gatagaacet teeagaagtg ggeagetgtg gtggtgeett etggagaaga geagagatae acatgeeatg tacageatga ggggetgeeg aageeeetea eeetgagatg gg	600 660 720 780 822
<210> 657 <211> 822 <212> DNA <213> Homo sapiens	,
<400> 657 geteceacte catgaggtat ttetacaceg ceatgteeg geeggeege ggggageeee getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagteegag agaggageeg egggeeget ggatagagea ggaggggeeg gagtattggg aceggaacae acagatetge aagaceaaca cacagaetta eegaggagge etgeggaace tgegeggeta etacaaceag agegaggeeg ggteteacae eetecagagg atgtaegget gegaegtggg geeggaegg egeeteetee gegggeatga eeagteegee tacgaeggea aggattacat egeeetgaae gaggaeetge geteetggae egegeggae aeggeggete agattacacea gegeaagtgg gaggeegeee gtgaggegga geagetgaga geetaeetgg agattacacea gegeaagtgg gaggeegeee gtgaggegga geagetgaga geetaeetgg agggeetgtg egtggagtgg eteegagat acetggagaa egggaaggag aceteetgg agggeetgtg egtggagtgg eteegagat acetggagaa egggaaggag acetgeage gegeggacee eceaaagaca eatgtgacee aceaceceat etetgaceat gaggeeacee tgaggteetg ggeeetggge ttetaceetg eggagateae actgaeetgg eageggatg gegaggaeea aacteaggae acegagettg tggagaeeag accageagga gatagaacet tecagaagtg ggeagetgtg gtggtgeett etggagaaga geagagatae acatgeeatg tecagaagtg ggeagetgtg gtggtgeett etggagaaga geagagatae acatgeeatg tacageatga ggggetgeeg aageeetea ecetgagatg gg	60 120 180 240 300 360 420 480 540 600 660 720 780 822
<210> 658 <211> 546 <212> DNA <213> Homo sapiens	
<400> 658 geteccaete catgaggtat ttetacaeeg ceatgteeg geceggeege ggggageece getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg egagteegag gatggegee egagteega gatggegee ggggagee gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegagaggee etgeggaaee tgegeggeta etacaaeeag agegaggeeg ggteteaeae eetecagagg atgtaegget gegaegtggg geeggaeggeeggeeteetee gegggeataa eeagttagee taegaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egegeggee aggataeaee aggataeeea gegeaagtgg gaggeggeee gtgaggegga geagtggag geetaeetgg agggeetgte egtgagtgg eteegeagt aceteggaaa egggaaggag acgetgeage gegegg	60 120 180 240 300 360 420 480 540
<210> 659 <211> 546 <212> DNA <213> Homo sapiens	
<400> 659 geteceaete catgaggtat ttetacaeeg ecatgteeg geceggeege ggggageece getteatete agtgggetae gtggaegaea egcagttegt gaggttegae agegaegeeg egagteegag agaggageeg egggeeget ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagateaaea cacagaetta eegaggagae etgeggaaee tgegeggeta etacaaeeag agegaggeeg ggteteaeae eetecagagg atgtaegget gegaegtggg geeggaeggg egeeteetee gegggeatga ecagteegee tacgaeggea aggattaeat egeettgaae gaggaeetga geteetggae egeggeggae aeggeggete	60 120 180 240 300 360 420

agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg  480 540 546	
<210> 660 <211> 546 <212> DNA <213> Homo sapiens	
<400> 660gctcccacte catgaggtat ttetacaccg ccatgtcccg gcccggccgc ggggagcccc gcttcatcgc agtgggctac gtggacgaca cccagttcgt gaggttcgac agcgacgccg 120 cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg 180 accgggagac acagatetec aagaccaaca cacagactta ccgagagagc ctgcggaacc 240 tgcgcggeta etacaaccag agcgaggccg ggteteacac cetecagagg atgtacgget 300 gcgacgtggg gccggacggg cgcetectec gcgggcatga ccagtccgc tacgacgga 360 aggattacat cgccctgaac gaggacctga getectgac cgcggcgac acggcggct 420 agatcaccca gcgcaagtgg gaggcggcc gtcaggcgga gcagtggaga gcctacctgg 480 agggcctgtg cgtggagtgg etccgcagat acctggagaa cgggaaggag acgetgcagc 540 gcgcgg	60
<210> 661 <211> 1017 <212> DNA <213> Homo sapiens	
atgeggtea eggegeeeg aaceeteete etgetgetet gggggeagt ggeeetgaee 60 gagacetggg etggeteea etceatgagg tattteeaea eeteegtgte eeggegeeg 120 egeggggage eegetteat eteagtgge taegtggaeg geaceeagtt egtgaggtte 180 gacagegaeg eegegagtee gaggaeggag eeegggege egtggataga geaagagggg 240 eeggagtatt gggaceggaa eacacagate tecaagaeea acacacagae ttaeegagag 300 ageetgegga acetgegegg etaetaeaae eagagegagg eegggtetea eaceeteeag 360 aggatgtaeg getgegaegt ggggeeggae gggegeetee teegegggea tgaeeagtee 420 geetaegaeg geaaggatta eategeeetg aacgaggaee eegggtege ggaeegeegg 480 gacacegegg eteagateae eeagegaag tgggaggegg eeegtgtge ggageagetg 540 agageetaee tggagggeae gtgegtggag tggeteegea gacacetgga gaacgggaag 600 gagaegetge agegegga eeeeceaaag acacatgtga eeeaceacee eatetetgae 660 eatgaggeea eeetgaggt etgggeeetg ggettetaee etgeggagat eacactgaee 720 tggeageggg atggegagga eeaaacteag gacacegage ttgtggagae eagaeeagea 780 gagagatagaa eetteeagaa gtggggege eegaageee teaceetgag atgggageea 900 tetteeeagt eeaceateee eategtgge attgttgetg geetggetg eetagegga 1017	
<210> 662 <211> 546 <212> DNA <213> Homo sapiens	
<400> 662 geteceacte catgaggtat ttecacacet cegtgteeeg geeeggeege ggggageeee 60 getteatete agtgggetae gtggaeggea eecagttegt gaggttegae agegaegeeg 120 egagteegag gaeggageee egggegeegt ggatagagea agaggggeeg gagtattggg aceggaace acagactee aagaceaaca cacagaetta cagagagage etgeggaace 240 tgegeggeta etacaaceag agegaggeeg ggteteacac eetecagagg atgtaegget 300 gegaegtggg geeggaeggg egeeteetee gegggeatga ecagteege tacgaeggea 360 aggattacat egeeetgaac gaggaeetga geteetggae eeggeggae acegeggete 420	

agateaceca gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetacetgg 480 agggeaegtg egtggagtgg eteegeagac acetggagaa egggaaggag aegetgeage 540 gegegg 546

<210> 663 <211> 1017

<212> DNA

<213> Homo sapiens

<400> 663

60 atgegggtea eggegeeeeg aacceteete etgetgetet ggggggeagt ggeeetgace 120 gagacetggg etggetecea etceatgagg tatttecaea eeteegtgte eeggeeegge 180 egeggggage eeegetteat eteagtggge taegtggaeg geacceagtt egtgaggtte gacagegaeg cegegagtee gaggaeggag ceeegggege egtggataga gcaagagggg 240 ccggagtatt gggaccggaa cacacagatc tccaagacca acacacagac ttaccgagag 300 360 agcetgegga acetgegegg etactacaac cagagegagg eegggtetca caccetecag 420 aatatgtatg getgegaegt ggggeeggae gggegeetee teegegggea tgaceagtee gcctacgacg gcaaggatta catcgccetg aacgaggacc tgagctcctg gaccgcggcg 480 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 agagcetace tggagggcae gtgcgtggag tggctccgca gacacetgga gaacgggaag 600 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacec catetetgae catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 tetteccagt ccaccatece categtggge attgttgetg geetggetgt cetageagtt 960 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 664

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 664

60 atgegggtea eggegeeeg aaceeteete etgetgetet ggggggeagt ggeeetgaee 120 cgeggggage cccgetteat eteagtggge taegtggaeg geacceagtt egtgaggtte 180 240 gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc cgtggataga gcaagagggg 300 ccggagtatt gggaccggaa cacacagatc tccaagacca acacacagac tgaccgagag 360 ageetgegga acetgegegg etactacaac eagagegagg eegggtetea eacecteeag 420 aggatgtacg getgegaegt ggggeeggae gggcgeetee teegegggea tgaceagtee 480 gcctacgacg gcaaggatta categecetg aacgaggace tgageteetg gaeegeggeg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg **540** 600 agagectace tggagggeae gtgcgtggag tggeteegea gacacetgga gaaegggaag 660 gagacgetge agegegega ecceecaaag acacatgtga eccaecace eatetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tettcccagt ccaccatece categtggge attgttgetg geetggetgt cctageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 665

<211> 546

<212> DNA

<213> Homo sapiens

120

180

240

300

360

420

480 540

546

<400> 665	
gctcccactc catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc	60
gcttcattgc agtgggctac gtggacggca cccagttcgt gaggttcgac agcgacgccg	120
cgagtccgag gacggagccc cgggcgccgt ggatagagca agaggggccg gagtattggg	180
accggaacac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace	240
tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct	300
gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca	<b>36</b> 0
aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc	<b>42</b> 0
agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg	480
agggcacgtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc	540
gcgcgg	546

<210> 666 <211> 546

<212> DNA

<213> Homo sapiens

### <400> 666

geteceaete eatgaggtat ttecaeaeet eegtgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggaeggea eecagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggeeegt ggatagagea agaggggeeg gagtattggg aceggaaeae acagaetete aagaceaaea cacagaetta eegagagage etgeggaaee tgegeggeta etaeaaeeag agegaggeeg ggteteaeae eetceagagg atgtaegget gegaeegtggg geeggaegge egeeteetee gegggeatga eeagteegee taegaeggea aggattaeat egeeetgaag gaggaeetga geteetggae egegggee agateaeeea gegeaagtgg gaggegeee gtgtggegga geagetgaga geetaeetgg agggeaegtg egtggagtgg eteegeagae acetggagaa egggaaggag aegetgeage gegegg

<210> 667

<211> 1017

<212> DNA

<213> Homo sapiens

## <400> 667

60 atgcgggtca cggcgccccg aaccetecte etgetgetet ggggggcagt ggccetgace 120 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg gcacccagtt cgtgaggttc 240 gacagogaçg cogogagtoc gaggaoggag cocogggogo ogtggataga gcaagagggg 300 ccggagtatt gggaccggaa cacacagatc tccaagacca acacacagac ttaccgagtg 360 agectgegga acetgegegg etaetacaac cagagegagg eegggtetea caccetecag aggatgtacg getgegaegt ggggeeggae gggegeetee teegegggea tgaceagtee 420 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 600 agagcetace tggagggeae gtgegtggag tggeteegea gacacetgga gaacgggaag gagacgetge agegegegga ccccccaaag acacatgtga cccaccaccc catetetgac 660 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteceagt ceaceatece eategtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<sup>&</sup>lt;210> 668

<sup>&</sup>lt;211> 546

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

<400> 668 geteceaete catgaggtat ttecaeaeet eegtgteeeg geeggeege ggggageeee getteatete agtgggetae gtggaeggea eecagttegt gaggttegae agegaegeeg egagteegag gaeggageee egagteegag gaegggeeg gagtattggg aceggaaeae acagatette aagaceaaea cacagaetta eegagaggee etgeggaaee tgegeggeta etaeaaeeag agegaggeeg ggteteaeae eeteeagag atgtaegget gegaegtggg geeggaeggg egeeteetee gegggeatga eeagteegee taegaeggea aggataeat egeeetgaae gaggaeetga geteetggae egeggeggae aeegeggete agateaeeea gegeaagtgg gaggegeee gtgtggegga geagetgaga geetaeetgg agggeaegtg egtggagtgg eteegeaga aeetggagaa eegegggggegggeeggge	240 300 360 420 480
<210> 669 <211> 546 <212> DNA <213> Homo sapiens	
<400> 669 geteceaete catgaggtat ttecaeaeet eegtgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggaeggea eecagttegt gaggttegae agegaegeeg egagteegag gaeggageee egagteegag gaeggageee egagtatggg aceggageee gagtattggg aceggaaeae acagaetee aagaeeaaea eacagaetta eegagagage etgeggaaee tgegeeggeta etaeaaeeag agegaggeeg ggteteaeae eeteeagag atgtgegget gegaegtggg geeggaeggg egeeteetee gegggeatga eeagteegee taegaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egeggegee agateaeea gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetaeetgg agggeaegtg egtggagtgg eteeggaae acetggagaa egggaaggag acgetgeage gegegg	60 120 180 240 300 360 420 480 540 546
<210> 670 <211> 546 <212> DNA <213> Homo sapiens	
<400> 670 geteceaete catgaggtat ttecaeaeet cegtgteeeg geeggeege ggggageeee getteatete agtgggetae gtggaeggea eccagttegt gaggttegae agegaegeeg egagteegag gaeggageee egagteegag gaeggageee gggtatgagea agaggggeeg gagtattggg aceggaaeae acagaetee aagaeeaaea eacagaetta eegagagaae etgegeaeeg egeteegeta etaeaaeeag agegaggeeg ggteteaeae eeteegaaggaatgeeg gegaegtggg geeggaeggg egeeteetee gegggeatga eeagteegee taegaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egeggeggae aeegeggete agateaeeea gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetaeetgg agggeaeegtg egtggagtgg eteegeagae aeetggagaa egggaaggag aegetgeage gegegg	60 120 180 240 300 360 420 480 540 546
<210> 671 <211> 546 <212> DNA <213> Homo sapiens	
<400> 671 geteceaete eatgaggtat ttecacacet eegtgteeeg geceggeege ggggageeee getteatete agtgggetae gtggaeggea eecagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggegeegt ggatagagea agaggggeeg gagtattggg aceggaacae acagatetee aagaceaaca cacagaetta eegagagage etgeggaace	60 120 180 240

tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg		
<210> 672		
<211> 546		
<212> DNA		
<213> Homo sapiens		
<400> 672 geteceaete catgaggtat ttecaeaeet cegtgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggacggea ceeagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggegeegt ggatagagea agaggggeeg gagtattggg aceggaaeae acagatetee aagaceaaea cacagaetta cegagagage etgeggaaee tgegeggeta etaeaaeeag agegaggeeg ggteteaeae eeteeagag atgtaegget gegaegtggg geeggaeggg egeeteetee gegggeatga eeagteegee taegaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egeggggae aeegeggete agateaeeea gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetaeetgg agggeaegtg egtggagtgg eteeggaatga eegggaaggag aegetgaga gegeegg	60 120 180 240 300 360 420 480 540 546	
.010050		
<210> 673 <211> 546		
<211> 546 <212> DNA		
<213> Homo sapiens		
.400- 050		
<ul> <li>&lt;400&gt; 673</li> <li>geteceacte catgaggtat ttecacacet cegtgteeeg geeeggeege ggggageece geteactee at gaggetae gtggaeggea eccagttegt gaggttegae agegaegeeg 120</li> <li>cgagteegag gaeggagee egggeegg ggatatgagea agagggeeg gagtattggg acegggagae acegggagee ggeteeacac aceagagtae etacagaggaee ggeteeacac eetecagaggatgaeeggeeggeeggeeggeeggeeggeeggeeg</li></ul>		
<210> 674		
<211> 546		
<212> DNA		
<213> Homo sapiens		
<400> 674		
geteceaete eatgaggtat ttecaeaeet eegtgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggaeggea eeeagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggegeegt ggatagagea agaggggeeg gagtattggg aceggaaeae acagaetee aagaeeaaea eacagaetta eegaggggee etgeeggaaee tgegeggeta etaeaaeeag agegaggeeg ggteteaeae eetceagagg atgtaegget gegaegtggg geeggaeggg egeeteetee gegggeatga eeagteegee taegaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egeggeggae aeegeggete	60 120 180 240 300 360 420	
agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagcggaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc	480 540	
acacaa	546	

gcgcgg

60 120

180

240 300

360

420

480

540 546

180

240

360

420

480

540

546

```
<210> 675
<211>
      546
<212>
      DNA
```

<213> Homo sapiens

<400> 675

geteceacte catgaggtat ttecacacet cegtgteeeg geeeggeege ggggageeee 60 120 getteatete agtgggetae gtggaeggea eccagttegt gaggttegae agegaegeeg 180 cgagtccgag gacggagccc cgggcgccgt ggatagagca agaggggccg gagtattggg 240 accggaacac acagatetec aagaccaaca cacagaetta eegagagage etgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca 360 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg 480 agggcacgtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc 540 gcgcgg

<210> 676 <211> 546 <212> DNA <213> Homo sapiens

<400> 676

geteceacte catgaggtat ttecacacet cegtgteceg geeeggeege ggggageece getteatete agtgggetae gtggaeggea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccgt ggatagagca agaggggccg gagtattggg accggaacac acagatetec aagaccaaca cacagaetta eegagagage etgeggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gegacgtggg geeggacggg egeeteetee gegggeatga eeagteegee taegacggea aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 677 <211> 546 <212> DNA <213> Homo sapiens

<400> 677

60 geteceacte catgaggtat ttccacacet cegtgteceg geeeggeege ggggageece 120 getteatete agtgggetae gtggaeggea eccagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggegeegt ggatagagea agaggggeeg gagtattggg accggaacac acagatetec aagaceaaca cacagaetta ccgagagage ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtctggct 300 gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 678 <211> 546 <212> DNA <213> Homo sapiens

<400> 678

geteceacte catgaggtat ttecacacet cegtgteceg geceggeege ggggageece	60
getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeeg	120
cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg	180
accgggagac acagatetge aaggecaagg cacagaetta eegagagaac etgegeaccg	240
cgctccgcta ctacaaccag agcgaggccg ggtctcacac cctccagaat atgtatggct	300
gcgacgtggg gccggacggg cgcctcctcc gcgggtacca ccaggacgcc tacgacggca	360
aggattacat cgccctgaac gaggacctga gctcctggac cgccgcggac acggcggctc	420
agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg	480
agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	<b>54</b> 0
gcgcgg	546

<210> 679

<211> 1017

<212> DNA

<213> Homo sapiens

# <400> 679

60 atgegggtea eggegeeeeg aacceteete etgetgetet ggggggeagt ggeeetgace gagacetggg etggetecca etceatgagg tatttecaea eeteegtgte eeggeeegge 120 180 egeggggage eeegetteat eacegtggge taegtggaeg acaegetgtt egtgaggtte gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggga gacacagatc tgcaaggcca aggcacagac tgaccgagag 360 aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccgggtctca caccctccag 420 aatatgtatg getgegaegt ggggeeggae gggegeetee teegegggta ceaceaggae gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgccgcg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 600 agageetace tggagggega gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga cececeaaag acacaegtga cecaceacee catetetgae catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtgc ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 960 tetteccagt ceaeegteec categtggge attgttgetg geetggetgt eetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

240

300

240

300

<210> 680

<211> 1017

<212> DNA

<213> Homo sapiens

# <400> 680

60 atgegggtea eggegeeceg aacceteete etgetgetet ggggggeagt ggeectgaee gagacetggg etggetecea etceatgagg tatttecaea eeteegtgte eeggeeegge 120 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggagcatt gggaccggga gacacagatc tgcaaggcca aggcacagac tgaccgagag 360 gacetgegga ecetgeteeg etaetacaae cagagegagg eegggtetea eaceeteeag 420 aatatgtatg getgegacgt ggggeeggac gggegeetee teegegggta eeaccaggac 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgccgcg 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg agagcctacc tggagggcga gtgcgtggag tggctccgca gatacctgga gaacgggaag 600 660 gagacgetge agegegegga cececcaaag acacaegtga eccaecaece catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 840 ggagatagaa cettecagaa gtgggcaget gtggtggtgc ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 960 tetteccagt ceaeegtece eategtggge attgttgetg geetggetgt eetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 681 <211> 1017 <212> DNA

<213> Homo sapiens

<400> 681

60 atgegggtea eggegeeeeg aacceteete etgetgetet ggggggeagt ggeeetgace 120 gagacetggg etggetecea etceatgagg tatttecaea eeteegtgte eeggeeegge 180 cgeggggage ccegetteat cacegtggge taegtggaeg acaegetgtt cgtgaggtte gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 240 300 ccggagtatt gggaccggga gacacagatc tgcaaggcca aggcacagac tgaccgagag 360 agectgegga ecetgeteeg etactacaac cagagegagg eegggtetea caeceteeag 420 aatatgtatg getgegaegt ggggeeggae gggegeetee teegegggta ceaccaggae 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeegeg 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg agagectace tggagggega gtgcgtggag tggctccgca gatacetgga gaacgggaag 600 660 gagacgetge agegegegga cececcaaag acacaegtga eccaecacee catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctggggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 960 tetteccagt ceacegtece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 682 <211> 1017 <212> DNA <213> Homo sapiens

## <400> 682

60 atgcgggtca cggcgccccg aaccctcctc ctgctgctct ggggggcagt ggccctgacc 120 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 240 ccggagtatt gggaccggga gacacagatc tgcaaggcca aggcacagac tgaccgagag 300 360 gacetgegga ecetgeteeg etactacaac cagagegagg eegggtetea caecetecag aatatgtatg getgegaegt ggggeeggae gggegeetee teegegggta ceaceaggae 420 gectacgacg geaaggatta categeeetg aacgaggace tgageteetg gacegeegeg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 600 agageetaee tggagggega gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acacacgtga eccaecacce catetetgae catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg tetteceagt ceaeegtece eategtggge attgttgetg geetggetgt eetageagtt 960 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 683 <211> 427 <212> DNA <213> Homo sapiens

<400> 683

gctacgtgga cgacacgctg ttcgtgaggt tcgacagcga cgccgcgagt ccgagagagg 60
agccgcgggc gccgtggata gagcaggagg ggccggagta ttgggaccgg gagacacaga 120
tctgcaaggc caaggcacag actgaccgag aggacctgcg gaccctgctc cgctactaca 180
accagagcga ggccgggtct cacaccctcc agaatatgta tggctgcgac gtggggccgg 240

·	
acgggcgcct cctccgcggg taccaccagg acgcctacga cggcaaggat tacatcg tgaacgagga cctgagctcc tggaccgccg cggacacggc agctcagatc acccago agtgggaggc ggcccgtgtg gcggagcagc tgagagccta cctggagggc gagtgc agtggct	cgca 360
<210> 684 <211> 619 <212> DNA <213> Homo sapiens	,
<400> 684 atgeggtea eggegeeeg aaceeteete etgetgetet ggggggeagt ggeeetgag gagacetgg eeggeteea etceatgagg tattteaaa eeteegtgte eeggeeegg egeggggage eeggeteat eacegtgge taegtggaeg acaegetgtt egtgaggt gacagegaeg eeggagtee gagaggagg eeggggege egtggataga geagg eeggatatt gggaeegga gacaaggate tgeaaggeea aggeeagag eegggtetea eaceetee gacetgega eeetgeteeg etaetacaae eagagegagg eegggtetea eaceetee aatatgtatg getgegaegt ggggeeggae gggegeetee teegeggta eeaceaggeetaegaeg geaaggatta eategeeetg aacagggae tgageteetg gaeeggeg eeggeeggeeggeeggaeeggeeggeegg	gc 120 ttc 180 taggggg 240 gagag 300 tag 360 gac 420 gcg 480 tgctg 540
<210> 685 <211> 895 <212> DNA <213> Homo sapiens	
atgeggtea eggegeeeeg aaceeteete etgetgetet ggggggeagt ggeeetgag gagacetggg etggeteeea etceatgagg tattteeaca eeteegtgte eeggegeegg egggggage eeegetteat eacegtgge taegtggaeg acaegetgtt egtgaggt gacagegaeg eeggagtee gagagaggag eeggggee egggggage eeggatete gagagaggag eegggeee egggggatat gggacegga gacaeggag eeeggatet gggacegga gacaeggag eeeggatetee eaceeteegaatatgatg getgegaegt ggggeeggae gggegeetee teegegggta eeaceagggeetaegaeg geetaegaeg geaaggatat eategeeetg aacgaggaee tgageteetg gacegeeggaegeetaegaeg geaaggatta eategeeetg aacgaggageeteete gaeegeeggaaggeetaeeggeggeetee teggaggegg eeeggaaggaeggaggeggeggaaggeggaagaegggggg	tc 120 tc 180 agggg 240 gagag 300 ag 360 gac 420 gcg 480 gctg 540 gaag 600 gac 660 cc 720 agca 780
<210> 686 <211> 546 <212> DNA	

<213> Homo sapiens

-

<400> 686

geteceaete eatgaggtat ttecaeaete eegtgteeeg geetgeege ggggageeee 60
getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeeg 120
egagteegag agaggageeg egggeeegt ggatagagea ggaggggeeg gagtattggg 180
acegggagae acagatetge aaggeeaagg eacagaetga eegagaggae etgeggaeee 240
geteegeta etaeaaeeag agegaggeeg ggteteaeae eeteeagaat atgtatgget 300
gegaegtggg geeggaeggg egeeteetee gegggtaeea eeaggaegee taegaeggea 360

420 aggattacat cgccctgaac gaggacctga gctcctggac cgccgcggac acggcggctc 480 agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 546 gcgcgg

<210> 687 <211> 1017 <212>

DNA <213> Homo sapiens

<400> 687

60 atgegggtea eggegeeeg aacceteete etgetgetet ggggggeagt ggeeetgace 120 gagacetggg etggetecea etceatgagg tatttecaea eeteegtgte eeggeeegge 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggaggg ccggagtatt gggaccggga gacacagatc tgcaaggcca aggcacagac tgaccgagag 300 360 agectgegga ecetgeteeg etaetacaac cagagegagg eegggtetea caeceteeag 420 aatatgtatg getgegaegt ggggeeggae gggegeetee teegegggta tgaccagtae 480 gcctacgacg gcaaggatta catcgccetg aacgaggace tgageteetg gaccgccgcg gacacggegg ctcagateac ccagegcaag tgggaggegg cccgtgagge ggagcagetg 540 agagectace tggagggega gtgcgtggag tggeteegea gatacetgga gaacgggaag 600 660 gagacgetge agegegegga ecceecaaag acacaegtga eccaecacee catetetgae 720 catgaggeca ccctgaggtg ctgggccctg ggcttctacc ctggggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccetgag atgggagccg 960 tetteceagt ceaecgtece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 688

<211> 945

<212> **DNA** 

<213> Homo sapiens

<400> 688

60 ggeteceaet ceatgaggta tttecaeaee teegtgteee ggeeeggeeg eggggageee cgetteatea eegtgggeta egtggaegae aegetgtteg tgaggttega eagegaegee 120 gcgagtccga gagaggagcc gcgggcgccg tggatagagc aggaggggcc ggagtattgg gaccgggaga cacagatetg caaggecaag geacagaetg accgagagga cetgeggaee 300 etgeteeget aetacaacca gagegaggee gggteteaca ceeteeagag catgtaegge tgcgacgtgg ggccggacgg gcgcctcctc cgcgggcata accagtacgc ctacgacggc 360 420 aaggattaca tegecetgaa egaggaeetg egeteetgga eegeeggga eaeggegget cagateacce agegeaagtg ggaggeggee egtgtggegg ageagetgag agectaeetg gagggcgagt gcgtggagtg gctccgcaga tacctggaga acgggaagga gacgctgcag egegeggace ecceaaagae acaegtgace caccaceca tetetgacea tgaggecace 600 ctgaggtgct gggccctggg cttctaccct gcggagatca cactgacctg gcagcgggat 660 ggcgaggacc aaactcagga cactgagett gtggagacca gaccagcagg agatagaacc ttccagaagt gggcagctgt ggtggtgcct tctggagaag agcagagata cacatgccat 780 gtacagcatg aggggctgcc gaagcccctc accctgagat gggagccgtc ttcccagtcc 840 acceteccea tegtgggeat tettgetgge etggetetee tageagttet geteategga 900 gctgtggtcg ctgctgtgat gtgtaggagg aagagctcag gtgga

180

240

480

540

720

945

<210> 689

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 689	
atgegggtea eggegeeeeg aacceteete etgetgetet ggggggeagt ggeeetgace	60
	120
cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc	180
gacagcgacg ccgcgagtcc gagagaggag ccgcggggcgc cgtggataga gcaggagggg	240
ccggagtatt gggaccggga gacacagatc tgcaaggcca aggcacagac tgaccgagag	300
agcetgegga acctgegegg etactacaac cagagegagg eegggtetea caccetecag	360
aatatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggta ccaccaggac	420
gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeegeg	480
gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg	<b>54</b> 0
agagcctacc tggagggcga gtgcgtggag tggctccgca gatacctgga gaacgggaag	600
gagacgctgc agcgcgcgga ccccccaaag acacacgtga cccaccaccc catctctgac	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca	780
ggagatagaa ccttccagaa gtgggcagct gtggtggtgc cttctggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg	900
tetteccagt ceaeegteec categtggge attgttgetg geetggetgt eetageagtt 96	0
gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga	1017

<210> 690

<211> 1017 <212> DNA

<213> Homo sapiens

<400> 690atgcgggtca cggcgccccg aaccetecte etgetgetet ggggggcagt ggccetgace 120 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc 180 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 240 ccggagtatt gggaccggga gacacagatc tgcaaggcca aggcacagac tgaccgagag 300 gacctgcgga ccctgctccg ctactacaac cagagcgagg ccgggtctca caccctccag 360 aatatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggta ccaccagcac 420 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgccgcg 480 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg agagectace tggagggega gtgcgtggag tggeteegea gatacetgga gaacgggaag 600 gagacgetge agegegegga ecceecaaag acacaegtga eccaecaece eatetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 900 tetteceagt ceaeegtece categtggge attgttgetg geetggetgt eetageagtt 960 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

60

<210> 691

<211> 546

<212> DNA

<213> Homo sapiens

<400> 691

60 geteceacte catgaggtat ttecacacet cegtgteeeg geeeggeege ggggageeee 120 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 180 accgggagac acagatetge aaggecaagg cacagactga eegagaggac etgeggacee 240 300 tgctccgcta ctacaaccag agcgaggccg ggtctcacac cctccagaat atgtatggct 360 gcgacgtggg gccggacggg cgcctcctcc gcgggtacca ccaggacgcc tacgacggca 420 aggattacat cgccctgaac gaggacctga gctcctggac cgccgcggac acggcggctc 480 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg 540 agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcgcgg

180

120

```
<210> 692
<211> 1017
<212> DNA
<213> Homo sapiens
```

# <400> 692

60 atgegggtca eggegeeeeg aacceteete etgetgetet ggggggeagt ggeeetgaee 120 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggaccggga gacacagatc tgcaaggcca aggcacagac tgaccgagag 360 agcetgegga ccetgeteeg etactacaac cagagegagg cegggtetea caccetecag 420 agcatgtacg getgegacgt ggggeeggac gggegeetee teegegggea taaccagtae 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgccgcg gacacggegg ctcagatcac ccagcgcaag tgggaggegg cccgtgtggc ggagcagctg 540 agagcetace tggagggega gtgcgtggag tggctccgca gatacetgga gaacgggaag 600 660 gagacgetge agegegegga ecceecaaag acacaegtga eccaecaece catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 840 ggagatagaa cettecagaa gtgggeaget gtggtggtge ettetggaga agageagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 960 tetteceagt ceaeegteec categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 693 <211> 1017 <212> DNA <213> Homo sapiens

# <400> 693

60 atgcgggtca cggcgcccg aaccetecte etgetgetet ggggggcagt ggccctgace  ${\tt gagacctggg}\ {\tt ctggctccca}\ {\tt ctccatgagg}\ {\tt tatttccaca}\ {\tt cctccgtgtc}\ {\tt ccggcccggc}$ 120  ${\tt cgcggggagc\ cccgcttcat\ caccgtgggc\ tacgtggacg\ acacgctgtt\ cgtgaggttc}$ 180 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggaccggga gacacagatc tgcaagacca acacacagac tgaccgagag 360 agectgegga acetgegegg etactacaac eagagegagg eegggtetea eaceeteeag 420 aatatgtatg getgegaegt ggggeeggae gggegeetee teegegggta eeaccaggae 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgccgcg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 600 agagcetace tggagggega gtgcgtggag tggctccgca gatacetgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acacaegtga eccaecaece catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg tetteccagt ceaeegteec categtggge attgttgetg geetggetgt cetageagtt 960 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 694 <211> 1017 <212> DNA <213> Homo sapiens

### <400> 694

atgegggtea eggageceeg aacceteete etgetgetet ggggggeagt ggeeetgace gagacetggg etggeteeca etceatgagg tattteeaca eeteegtgte eeggeeegge egeggggage eeegetteat eacegtggge taegtggaeg acaegetgtt egtgaggtte

gacagegacg cegegagtee gagagaggag cegegggege egtggataga geaggagggg	240
ccggagtatt gggaccggga gacacagatc tgcaaggcca aggcacagac tgaccgagag	300
gacctgcgga ccctgctccg ctactacaac cagagcgagg ccgggtctca caccctccag	360
aatatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggta ccaccaggac	420
gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgccgcg	480
gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg	<b>54</b> 0
agagectace tggagggega gtgcgtggag tggctccgca gatacetgga gaacgggaag	600
gagacgetge agegegegga ecceccaaag acacaegtga eccaceaece catetetgae	660
catgaggeca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcageggg atggegagga ccaaactcag gacactgage ttgtggagae cagaccagea	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg	900
tetteccagt ceaeegteec eategtggge attgttgetg geetggetgt eetageagtt 96	0
	1017

<210> 695

<211> 619

<212> **DNA** 

<213> Homo sapiens

## <400>

60 atgcgggtca cggcgcccg aaccctcctc ctgctgctct ggggggcagt ggccctgacc 120 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc 180 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 240 ccggagtatt gggaccggga gacacagatc tgcaaggcca aggcacagac tgaccgagag 300 360 gacctgcgga ccctgctccg ctactacaac cagagcgagg ccgggtctca cacttggcag 420 acgatgtatg getgegacet ggggeeggac gggegeetee teegegggta eeaccaggae 480 gcctacgacg gcaaggatta categecetg aacgaggace tgageteetg gacegeegeg 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 600 agagcetace tggagggega gtgcgtggag tggeteegea gatacetgga gaacgggaag 619 gagacgctgc agcgcgcgg

<210> 696

<211> 546

<212> DNA

<213> Homo sapiens

## <400> 696

60 geteceacte catgaggtat ttecacacet cegtgteeeg geeeggeege ggggageeee 120 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 180 accgggagac acagatetge aaggceaagg cacagactga ccgagagage etgeggacee 240 tgctccgcta ctacaaccag agcgaggccg ggtctcacac cctccagaat atgtatggct 300 360 gcgacgtggg gccggacggg cgcctcctcc gcgggtacca ccaggacgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgccgcggac acggcggctc 420 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg 480 **540** agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 697

<211> 546

<212> DNA

<213> Homo sapiens

<400>

	2137 102	
-	gettcatcac egtgggetac gtggacgaca egetgttegt gaggttegac agegacgeeg egagteegag agaggageeg egggegeegt ggatagagea ggaggggeeg gagtattggg acegggagac acagatetge aagaccaaca cacagactga eegagaggac etgeggacee tgeteegeta etacaaccag agegaggeeg ggteteacac eetecagaat atgtatgget gegacgtggg geeggacggg egeeteetee gegggtacea eeaggacgee tacgacggea aggattacat egeeetgaac gaggacetga geteetggac egeegggac aeggeggee agateacea gegcaagtgg gaggeggeee gtgtggegga geagetgaga geetacetgg agggeggagtg egtggagtgg eteegeagat acetggagaa egggaaggag aegetgeage gegegg	120 180 240 300 360 420 480 540 546
	<210> 698 <211> 546 <212> DNA <213> Homo sapiens <400> 698 gatescapte entraggetat thereesest contateses gazegages gaggageses	60
	geteceaete eatgaggtat ttecacacet eegtgteeeg geeeggeege ggggageeee getteateae egtggetae gtggaegaea egetgttegt gaggttegae agegaegeeg egagteega agaggageeg egggeeegt ggatagagea ggagggeeg gagttttggg acegggagae acagatetge aaggeeaagg eacagaetga eegagggae etgeeggaeee tgeteegeta etacaaceag agegaggeeg ggteteaeae eetecagaat atgtatgget gegaegtggg geeggaegge egeeteetee gegggtaeea eeaggaegee taegaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egeegeggee agateaeea gegeaagtgg gaggeegee gtgtggegga geagetgaga geetaeetgg aggeegagtg egtggagtg eteegeagat acetggagaa eggeggageggeegggeegg	120 180 240 300 360 420 480 540 546
	<210> 699 <211> 619 <212> DNA <213> Homo sapiens	
_	<400> 699 atgcgggtca cggcgccccg aaccetecte etgetgetet ggggggcagt ggccetgace gagacetggg etggetecca etccatgagg tatttecaca cetecgtgte eeggeeegge leggggggage eegggtcat eacegtggge tacgtggacg acacgetgtt egtgaggtte gacagegage eeggggtce gagagagggg eeggggeeegggeeeggggggggggg	60 120 180 240 300 360 420 480 540 600 619
	<210> 700 <211> 546 <212> DNA <213> Homo sapiens	
	<400> 700 geteceacte catgaggtat ttecacacet cegtgteeeg geeeggeege ggggageeee getteateac egtgggetac gtggaegaca egetgttegt gaggttegac agegaegeeg egagteegag agaggageeg egggegeegt ggatagagea ggaggggeeg gagtattggg acegggagac acagatetge aaggeeaagg cacagaetga eegagggae etgeggaeee tgeteegeta etacaaceag agegaggeeg ggteteacat catecagagg atgtaegget	60 120 180 240 300

tgctccgcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtacggct

gcgacgtggg gccggacggg cgcctcctcc gcgggtacca ccaggacgcc tacgacggca

aggattacat cgccctgaac gaggacctga gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg	
<210> 701 <211> 546 <212> DNA <213> Homo sapiens	
getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeeg egagteegag agaggageeg egggegeegt ggatagagea ggaggggeeg gagtattgggaeegggagae acegggagae acagaetge aaggeeaagg cacagaetga eegagagae etgeggaeee	60 120 180 240 300 360 420 480 540 546
<210> 702 <211> 546 <212> DNA <213> Homo sapiens	
getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeeg egagteegag agaggageeg egggegeegt ggatagagea ggaggggeeg gagtattggg acegggagae acagatetge aaggeeaagg eacagaetga eegagagage etgeggaeee	60 120 180 240 300 360 420 480 540 546
<210> 703 <211> 546 <212> DNA <213> Homo sapiens	
getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeeg egagteegag agaggageeg egggegeegt ggatagagea ggaggggeeg gagtattggg aceggaaeae acagatette aagaceaaea cacagaetta eegagagage etgeggaeee	60 120 180 240 300 360 420 480 540

120

300

360

480

540

546

546

60

180

360

540 600

780

840 900

1017

660

420 480

240 300

420

180

240

<210> 704 <211> 546 <212> DNA <213> Homo sapiens

<400>

geteceacte catgaggtat ttecacacet cegtgteceg geceggeege ggggageece getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accgggagac acagatetge aaggceaagg cacagaetga eegagagac etgeggacee tgctccgcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aggattacat cgccetgaac gaggacetge geteetggae egeegeggae aeggeggete agatetecea gegeaagtgg gaggeggee gtgaggegga geagetgaga geetaeetgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 705 <211> 546 <212> DNA

<213> Homo sapiens

<400>

geteceacte catgaggtat ttecacacet eegtgteeeg geeeggeege ggggageeee 60 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeeg 120 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 180 accgggagac acagatetge aaggeeaagg cacagaetga eegagagage etgeggaeee 240 300 tgctccgcta ctacaaccag agcgaggccg ggtctcacac cctccagaat atgtatggct gcgacgtggg gccggacggg cgcctcctcc gcgggtacca ccaggacgcc tacgacggca 360 aggattacat cgccctgaac gaggacctga gctcctggac cgccgcggac acggcggctc 420 480 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg agggcetgtg egtggagtgg etcegeagat acetggagaa egggaaggag aegetgeage 540 gcgcgg

<210> 706 <211> 1017 <212> DNA <213> Homo sapiens

<400> 706

atgcgggtca cggcgcccg aaccgtcctc ctgctgctct ggggggcagt ggccctgacc 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca catcatccag aggatgtatg getgegacet ggggeeegae gggegeetee teegegggea tgaceagtee gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeggeg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg agagcetace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag gagacgetge agegegegga cececeaaag acacaegtga cecaceacee egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

546

240

780

```
707
<210>
<211>
       546
       DNA
<212>
<213>
       Homo sapiens
```

## <400>

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee 120 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg 240 accggaacac acagatette aagaceaaca cacagaetta eegagagage etgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct 360 gegaeetggg geeegaeggg egeeteetee gegggeatga eeagteegee tacgaeggea 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc 480 agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcttacctgg 540 agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 708 <211> 1017 <212> DNA

<213> Homo sapiens

### <400>

60 atgegggtea eggegeeeg aacegteete etgetgetet ggggggeagt ggeeetgace 120 gagacetggg ceggeteeca etceatgagg tatttetaca eegecatgte eeggeeegge 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag 360 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca catcatccag 420 aggatgtatg getgegacet ggggecegae gggegettee teegegggea taaceagtae gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg agagectacc tggagggect gtgegtggag tggeteegea gatacetgga gaaegggaag 600 660 gagacgetge agegegegga ecceccaaag acacaegtga eccaccaece egtetetgae catgaggeca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 709 <211> 1017

DNA <213> Homo sapiens

<400>

<212>

atgegggtea eggegeeeeg aacegteete etgetgetet ggggggeagt ggeeetgace 60 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 180 gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg 240 300 ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca catcatccag 360 420 aggatgtatg getgegacet ggggecegae gggegeetee teegegggea tgaceagtte 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag 600

gagacgetge agegegegga ccccccaaag acacacgtga cccaccacce egtetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca	900
tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 9	60
gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga	1017

<210> 710 <211> 1017 <212> DNA

<213> Homo sapiens

## <400> 710

atgcgggtca cggcgcccg aaccgtcctc ctgctgctct ggggggcagt ggccctgacc 60 120 180 egeggggage eeegetteat egeagtggge taegtggaeg acacccagtt egtgaggtte 240 gacagegaeg cegegagtee gaggaeggag ceeegggege catggataga geaggaggg ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag 300 360 agcetgegga acetgegegg etactacaac cagagegagg eegggtetea catcatecag 420 aggatgtatg getgegaeet ggggeeegae gggegeetee teegegggea taaceagtae 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gaeegeggeg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaaegggaag 600 gagacgetge agegegegga ecceecaaag acaeaegtga eccaecacee egtetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 tetteceagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 960 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 711 <211> 1017 <212> DNA <213> Homo sapiens

# <400> 711

60 atgegggtea eggegeeeg aacegteete etgetgetet ggggggeagt ggeeetgaee 120 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagegacg cegegagtee gaggaeggag ceeegggege catggataga geaggaggg 240 300 ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag 360 agectgegga acetgegegg etactacaac eagagegagg eegggtetea eaceeteeag 420 agcatgtacg getgegacet ggggcccgae gggcgcctcc teegegggca tgaccagtee 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 600 agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegega ecceecaaag acacaegtga eccaecaece egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtgc ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca tetteccagt ceaceatece eategtggge attgttgetg geetggetgt cetageagtt 960 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<211> 1017 <212> DNA

<213> Homo sapiens

<400> 712

atgcgggtca cggcgcccg aaccgtcctc ctgctgctct ggggggcagt ggccctgacc 60 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 180 gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg 240 ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag 300 agcetgegga acetgegegg etactacaac eagagegagg eegggtetea eateateeag 360  ${\tt aggatgtatg\ gctgcgacct\ ggggcccgac\ gggcgcctcc\ tccgcgggca\ taaccagttc}$ 420 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 agagcetace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag 600 gagacgetge agegegegga ecceedaaag acacaegtga eccaecaece egtetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 960 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 713

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 713

atgcgggtca cggcgcccg aaccgtcctc ctgctgctct ggggggcagt ggccctgacc 60 gagacetggg eeggeteeca etceatgagg tatttetaca eegeeatgte eeggeeegte 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 180 gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggaggg 240 ccggagtatt gggaccggaa cacacagate ttcaagacca acacacagae ttaccgagag 300 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca catcatccag 360 aggatgtatg gctgcgacct ggggcccgac gggcgcctcc tccgcgggca tgaccagtcc 420 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 agagcctacc tggagggcct gtgcgtggag tggctccgca gatacctgga gaacgggaag 600 gagacgetge agegegegga ecceecaaag acaeaegtga eccaecace egtetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 960 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 714

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 714

agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca catcatccag	360
aggatgtatg getgegacet ggggecegae gggegeetee teegegggea tgaceagtee	420
gectacgacg geaaggatta categeeetg aacgaggace tgageteetg gacegeggeg	480
gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagcgg	<b>540</b>
agagectace tggagggeet gtgcgtggag tggeteegea gatacetgga gaaegggaag	600
gagacgetge agegegegga ecceecaaag acacaegtga eccaecaece egtetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca	900
tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 96	60
gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga	1017

<210> 715

<211> 1017

<212> DNA

<213> Homo sapiens

### <400> 715

60 atgcgggtca cggcgccccg aaccgtcctc ctgctgctct ggggggcagt ggccctgacc 120 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg 240 300 ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca catcatccag 360 aggatgtatg getgegacet ggggecegae gggegeetee teegegggea taaceagtae 420 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgcggcg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 600 agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acacaegtga eccaecacee egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteceagt ceaccatece categtggge attgttgetg geetggetgt cetageagtt gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 716

<211> 546

<212> DNA

<213> Homo sapiens

### <400>

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee 60 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg 120 cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg 240 accggaacac acagatette aagaccaaca cacagaetta cegagagage etgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct gcgacctggg gcccgacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca 360 aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc 420 480 agatcaccca gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetacetgg agggcetgtg egtggagtgg etcegeagat acetggagaa egggaaggag aegetgeage gcgcgg

180

540

546

<210> 717

<211> 525

<212> DNA

### <213> Homo sapiens

<400>	· 717

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece 60 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg 120 cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg 180 accgggagac acagatette aagaceaaca cacagaetta ccgagagage ctgcggaace 240 tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct 300 360 gcgacctggg gcccgacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca 420 aggattacat egecetgaac gaggacetga geteetggac egeggeggac acegeggete 480 agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg 525 agggcctgtg cgtggagtgg ctccgcagat acctggagaa cggga

<210> 718 <211> 1017 <212> DNA

<213> Homo sapiens

# <400> 718

60 atgegggtea eggegeeeg aacegteete etgetgetet gggggggagt ggeeetgace 120 180 egeggggage eeegetteat egeagtgge taegtggaeg acaeceagtt egtgaggtte gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag 360 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca catcatccag 420 aggatgtatg getgegacet ggggecegae gggegeetee teegegggea tgaceagtee 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gaeegeggeg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 600 agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaaegggaag 660 gagacgetge agegegegga cececeaaag acacaegtga cecaceacee egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggeaget gtggtggtge ettetggaga agageagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccetgag atgggagcca 960 tetteceagt ceaceatece eategtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

240

540

780

840

60

240 300

360

420

480

540

600

780

840 900

660

719 <210> <211> 1017

<212> DNA

<213> Homo sapiens

#### <400> 719

atgegggtea eggegeeeg aacegteete etgetgetet ggggggcagt ggeeetgace 120 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag ageetgegga acetgegegg etactacaac eagagegagg eegggtetea cateateeag aggatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagtac gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gaccgeggeg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag gagacgetge agegegegga ecceecaaag acacaegtga eccaecaece egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca

960 tetteceagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga 1017 <210> 720 <211> 546 <212> DNA <213> Homo sapiens <400> 720 60 geteceacte catgaggtat ttetacaceg ceatgteecg geceggeege ggggageece 120 getteatege agtgggetae gtggaegaea eecagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg 180 240 accgggagac acagatette aagaccaaca cacagactta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct 300 gcgacctggg gcccgacggg cgcctcctcc gcgggcatga ccagttcgcc tacgacggca 360 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc 420 480 agateaceea gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetacetgg agggcetgtg cgtggagtgg etcegeagat acetggagaa egggaaggag aegetgeage 540 546 gcgcgg <210> 721 <211> 546 <212> DNA <213> Homo sapiens <400> geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee 60 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg 120 180

cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatette aagaccaaca cacagaetta cegagagage etgeggaace tgegeggeta etacaaceag agegaggeeg ggteteacat eatecagagg atgtatgget gcgacetggg gcccgacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agateaceca gegeaagtgg gaggeggeee gtgaggegga geagtggaga geetacetgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

240

300

360

420 480

540

240 300

540 600

780

840

546

<210> 722 <211> 1017 <212> DNA <213> Homo sapiens

<400>

60 atgegggtea eggegeeeg aacegteete etgetgetet ggggggeagt ggeeetgaee 120 gagacetggg eeggeteeca etceatgagg tatttetaca eegceatgte eeggeeegge 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg ccggagtatt gggaccggaa cacacagate ttcaagacca acacacagae ttaccgagag 360 agcetgegga acetgegegg etactacaac cagagegagg eegggtetca catcatecag 420 aggatgtatg getgegacet ggggecegae gggegeetee teegegggea tgaceagtee 480 gcctacgacg gcaaggatta catcgcctg aacgaggacc tgagctcctg gaccgcggcg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg agagcctacc tggagggcga gtgcgtggag tggctccgca gatacctgga gaacgggaag 660 gagacgetge agegegegga cececeaaag acacaegtga cecaceaece egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga

tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccetgag atgggagcca 900 tetteccagt ccaccatece categtggge attgttgetg gcetggetgt cctagcagtt 960 gtggtcateg gagetgtggt cgctactgtg atgtgtagga ggaagagete aggtgga 1017

<210> 723 <211> 546 <212> DNA <213> Homo sapiens

<400> 723

geteceaete eatgaggtat tetacaeeg ceatgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaea eecagttegt gaggttegae agegaegeeg egagteegag gaegggeee egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagatette aagaceaaea cacagaetta eegagaggee etgeggaaee tgegeggeta etacaaeeag agegaggeeg ggteteaeat eatecagage atgtaegget gegaegtggg geeegaegge egeeteetee gegggeatga eeagteegee tacgaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egegeggee aeegeggete agateaeea gegeaagtgg gaggeggee gtgtggegga geagetgaga geetaeetgg agggeetgtg egtggagtgg eteegeagat aeetggagaa egggaaggag aegetgeage gegegg

420 480 540 546

60

120

300

360

180

240

<210> 724 <211> 546 <212> DNA <213> Homo sapiens

<400> 724

546

60

120

<210> 725 <211> 546 <212> DNA <213> Homo sapiens

<400> 725

geteceaete catgaggtat tetacaecg ceatgteecg geceggeege ggggageece getteatege agtgggetae gtggaegaea eceagttegt gaggttegae agegaegeeg egagteegag gaeggageec egggegeeat ggatagagea ggaggggeeg gagtattggg aceggaaeae acagatette aagaceaaea cacagaetta eegagagage etgeggaaee tgegeggeta etacaaecag agegaggeeg ggteteaeat catecagagg atgtatgget gegaeetggg gecegaeggg egeeteetee gegggeataa eeagtaegee taegaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeegeggae aeggeggete agateaecea gegeaagtgg gaggeggeee gtgtggegga geageggaa geetaeetgg agggeetgte egtggagtgg eteegeagat acetggagaa egggaaggag aegetgeage geegeg

60 120 180

240 300

360 420 480

PCT/JP2004/019763 <211> 546 <212> DNA <213> Homo sapiens <400> 726 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee 60 120 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg 180 cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg 240 accggaacac acagatette aagaccaaca cacagaetta ccgagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct 300 gegaeetggg geeegaeggg egeeteetee gegggeatga ceagteegee taegaeggea 360 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc 420 agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg 480 agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 gcgcgg 546 <210> 727 <211> 546 <212> DNA <213> Homo sapiens <400> 727 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece 60 120 getteatege agtgggetae gtggaegaea eecagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg 180 accggaacac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace 240 tgegeggeta etacaaccag agegaggeeg ggteteacat catecagagg atgtatgget 300 gcgacctggg gcccgacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca 360 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc 480 agateaceea gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetaeetgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 gcgcgg 546 <210> 728 <211> 546 <212> DNA <213> Homo sapiens <400> geteceaete catgaggtat ttetacaeeg ceatgteeeg geeeggeege ggggageeee 60 120 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg 180 accggaacac acagatette aagaceaaca cacagaetta eegagagage etgeggaace 240 tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct 300

<210> 729

gcgcgg

<211> 546

<212> DNA

<213> Homo sapiens

<400> 729

gegacetggg geeegaeggg egeeteetee gegggeatga eeagteegee tacgaeggea

aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc

agatcaccca gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetacetgg

agggeetgtg egtggagtgg etcegeagae acetggagaa egggaaggag aegetgeage

360

420

480

540

0 2000/0	2907	102	1 01/01 200 1/015 / (
cgagtccg accggaac tgcgcggc gcgacgtg aggattac agatcacc	ge agtgggetae gtggaegaea eccagttegt g gag gaeggageee egggegeeat ggatagagee eac acagatette aagaecaaea eacagaetta eta etacaaecag agegaggeeg ggteteaeae ggg geeggaeggg egeeteetee gegggeataa eat egeeetgaae gaggaeetga geteetggae eaa gegeaagtgg gaggeggeee gtgtggegga gtg egtggagtgg eteegeagat acetggagaa	a ggaggggccg gagtattggg ccgagagagc ctgcggaacc cctccagagc atgtacggct ccagtacgcc tacgacggca cgcggcggac accgcggctc gcagctgaga gcctacctgg	120 180 240 300 360 420 480 540 546
<211> <212>	730 546 DNA Homo sapiens		
getteateg egagteeg aceggaad tgegegge gegaeetg aggattad agateace	730geteceaete catgaggtat ttetacaceg og agtgggetae gtggaegaea eceagttegt gag gaeggageee egggegeeat ggatagagea eac acagatette aagaceaaea cacagaetta ta etacaaecag agegaggeeg ggteteaeat gg geeegaegg egeeteetee gegggeatga eat egeeetgaae gaggaeetga geteetggae ea gegeaagtgg gaggeegeee gtgtggeggeegtg egtgegggegee gtgtggeggeegge	aggttcgac agcgacgccg a ggaggggccg gagtattggg ccgagagagc ctgcggaacc catccagagg atgtttggct ccagtccgcc tacgacggca cgcggcggac accgcggctc a gcagctgaga gcctacctgg	rgagcccc 60 120 180 240 300 360 420 480 540 546
<211> <212>	731 546 DNA Homo sapiens		
geteceaet getteateg egagteeg aceggaae tgegegge gegacetg aggattae agateaec	731 te catgaggtat ttetacaceg ceatgteeeg ge agtgggetae gtggaegaea eceagttegt gag gaeggageee egggegeeat ggatagagea eac acagatette aagaceaaca cacagatette ta etacaaceag agegaggeeg ggteteacat egg gecegaegg egeeteetee gegggeatga eat egeeetgaae gaggaeetga geteetggae eac agegeaagtgg gaggeegeee gtgtggeggeegtg egtgegggegee gtgtggeggatga egggeaagtgg gaggeggeee gtgtggeggatgg egtgegggegee gtgtggeggatgg egtgeggaggaegtgg egtgggaggaa	aggttegae agegaegeeg a ggagggeeg gagtattggg eegagagage etgeggaace cateeagagg atgtatgget eeagteegee taegaeggea egeggeggae aeegeggete a geagetgaga geetaeetgg	60 120 180 240 300 360 420 480 540 546
<211> <212>	732 546 DNA Homo sapiens		

<400> 732

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee 120 getteatete agtgggetae gtggacgaea egcagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggagggccg gagtattggg accggaacac acagatette aagaceaaca cacagaetta eegagagage etgeggaace 300  $tgcgcggcta\ ctacaaccag\ agcgaggccg\ ggtctcacat\ catccagagg\ atgtatggct$ 360 gcgacctggg gcccgacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca ..420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gegeaagtgg gaggeggece gtgtggcgga geagetgaga geetacetgg

180

240

agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 gcgcgg 546 <210> 733 <211> 546 <212> DNA <213> Homo sapiens <400> 733 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece 60 · getteatege agtgggetae gtggaegaea eecagttegt gaggttegae agegaegeeg 120 cgagtccgag agaggagccc cgggcgccat ggatagagca ggaggggccg gaatattggg 180 accggaacac acagatetge aagaccaaca cacagactta ccgagagage etgeggaace 240 tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct 300 gcgacctggg gcccgacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca 360 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc 420 agateaceca gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetacetgg 480 agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 gcgcgg 546 <210> 734 <211> 546 <212> DNA <213> Homo sapiens <400> 734 geteceacte catgaggtat ttetacaceg ceatgteeg geeggeege ggggageece 60 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg 120 cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg 180 accggaacac acagatette aagaceaaca cacagaetta ccgagagaac etgeggaace 240 tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct 300 gcgacctggg gcccgacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca 360 aggattacat egecetgaac gaggacetga geteetggae egeggeggae acegeggete 420 agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg 480 agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 gcgcgg 546 <210> 735 <211> 619 <212> DNA <213> Homo sapiens <400> 735 atgcgggtca cggcgccccg aaccgtcctc ctgctgctct ggggggcagt ggccctgacc 60 gagacetggg eeggeteeca etecatgagg tatttetaca eegceatgte eeggeeegge 120 egeggggage ecceetteat egeagtggge taegtggaeg acacceagtt egtgaggtte 180 gacagegacg cegegagtee gaggaeggag ceeegggege catggataga geaggagggg 240 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 300 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca catcatccag 360 aggatgtatg getgegaeet ggggeeegae gggegeetee teegegggea tgaceagtee 420 480 gcctacgacg gcaaggatta catcgcctg aacgaggacc tgagctcctg gaccgcggcg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 agagectace tggaggget gtgcgtggag tggeteegea gatacetgga gaaegggaag 600 gagacgctgc agcgcgcgg 619

	·	
	46	
	NA T	
<213> H	Iomo sapiens	
<400> 7	36	
	catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc	60
	agtgggctac gtggacgaca cccagttcgt gaggttcgac agcgacgccg	120
	g gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg	180
	ac acagatette aagaceaaca cacagaetga eegagagage etgeggaace	240 300
	a ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct	360
	g gecegaeggg egeeteetee gegggeatga eeagteegee taegaeggea It egeeetgaae gaggaeetga geteetggae egeggeggae aeegeggete	420
	a gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg	480
	g cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	540
gcgcgg	2 observed and another and a second and a second as a	546
8-8-88		
	37	
	46 DNA	
	Iomo sapiens	
1210	iomo dapiono	
	37	
	catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc	60
	c agtgggctac gtggacgaca cccagttcgt gaggttcgac agcgacgccg	120 180
	g gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg	240
	ac acagatette aagaceaaca cacagaetta eegagagage etgeggaace a etacaaceag agegaggeeg ggteteacat catecagage atgtaegget	300
	g gcccgacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca	360
aggattaca	at cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc	420
agatcaccc	a gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg	480
	g cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	<b>54</b> 0
gcgcgg		546
<210> 7	738	
<211> 1	017	
	DNA	
<213> F	Homo sapiens	
<400> 7	738	
	a cggcgccccg aaccgtcctc ctgctgctct gggggggcagt ggccctgacc	60
	gg ceggetecea etceatgagg tatttetaea eegecatgte eeggeeegge	120
	ge ecceetteat egeagtggge taegtggaeg acaeceagtt egtgaggtte	180
	cg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggaggg	240
	t gggaccggaa cacacagate tteaagacca acacacagae ttaccgagag	300 360
agcctgcgg	ga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag cg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagtac	420
	eg gcaaggatta categeeetg aacgaggace tgegeteetg gacegeegeg	480
	gg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg	540
agagectae	cc tggagggcga gtgcgtggag tggctccgca gatacctgga gaacgggaag	600
	ge agegegegga cececcaaag acacaegtga eccaceacee catetetgae	660
	ca coctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720

 ${\tt catgaggcca}\ {\tt ccctgaggtg}\ {\tt ctgggccctg}\ {\tt ggcttctacc}\ {\tt ctgcggagat}\ {\tt cacactgacc}$ 

tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa ccttccagaa gtgggcagct gtggtggtgc cttctggaga agagcagaga

 $tacacatgcc\ atgtacagca\ tgaggggctg\ ccgaagcccc\ tcaccctgag\ atgggagccg$ 

 $tetteccagt\ ccacegtece\ categtggge\ attgttgctg\ gcctggctgt\ cctagcagtt$ 

gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

720

780

840

900

1017

120

180

240

480 540

546

300

360 420

<211> 546

DNA <212>

<213> Homo sapiens

<400> 739

geteceacte catgaggtat ttetacaceg ceatgteeeg geceggeege ggggageece getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatette aagaccaaca cacagaetta ccgagagage ctgcggaacc tgegeggeta etacaaceag agegaggeeg ggteteacae eetecagagg atgtaegget gegacgtggg geeegaeggg egeeteetee gegggeatga eeagteegee tacgaeggea aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 740

<211> 564

<212> DNA

<213> Homo sapiens

60 <400> 740tgaccgagac ctgggccggc tcccactcca tgaggtattt ctacaccgcc atgtcccggc ccggccgcgg ggagccccgc ttcatcgcag tgggctacgt ggacgacacc cagttcgtga 120 180 ggttcgacag cgacgccgcg agtccgagga cggagccccg ggcgccatgg atagagcagg 240 aggggccgga gtattgggac cggaacacac agatettcaa gaccaacaca cagaettacc 300 gagagagect geggaacetg egeggetaet acaaceagag egaggeeggg teteacatea tccagaggat gtatggctgc gacctggggc ccgacgggcg cctcctccgc gggcatgacc 360 420 agttegecta egaeggeaag gattacateg eeetgaacga ggaeetgage teetggaeeg 480 cggcggacac cgcggctcag atcacccagc gcaagtggga ggcggcccgt gtggcggagc agctgagagc ctacctggag ggcgagtgcg tggagtggct ccgcagatac ctggagaacg **540** ggaaggagac gctgcagcgc gcgg 564

<210> 741

<211> 546

DNA <212>

Homo sapiens <213>

<400> 741

60 gctcccactc catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc 120 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatette aagaccaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct gegacetggg geeegacggg egeeteetee gegggeatga ceagtaegee tacgaeggea aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

480 540 546

180

240 300

360 420

<210> 742

<211> 546

<212> DNA

<213> Homo sapiens

<400> 742

getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggegeeat ggatagagea ggaggggeeg gagtattggg aceggaaeae acagaette aagaeeaaea cacagaetta eegagagage etgeggaaee tgegeggeta etacaaeeag agegaggeeg ggteteaeat eateeagagg atgtatgget gegaeetggg geeegaeggg egeeteetee gegggeatga eeagteegee tacgaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egegeggae aeegeggete agateaeea gegeaagtgg gaggeggeee gtgtggegga geagetgaga acetaeetgg agggeaegtg egtggagtgg eteegeagat aeetggagaa egggaaggag aegetgeage gegegg	120 180 240 300 360 420 480 540 546

<210> 743 <211> 546 <212> DNA <213> Homo sapiens

<400> 743

geteceaete eatgaggtat tetacaeeg ceatgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaea eeeagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggegeeat ggatagagea ggaggggeeg gagtattggg aceggaaeae acagaetete aagaeeaaea cacagaetta eegagaggee etgeggaaee tgeeggaeta etacaaeeag agegaggeeg ggteteaeat eatecagagg atgtatgget gegaeetggg geeegaeggg egeeteetee gegggeatga eeagttegee taegaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egegeggee agegegete agateaeea gegeaagtgg gaggeggeee gtgtggegga geagetgag geetaeetgg agggeetgte egtggggga geagetgaga geetaeetgg agggeetgte egtggagtgg eteegeagat acetggagaa egggaaggag acgetgeage gegegg

<210> 744 <211> 546 <212> DNA <213> Homo sapiens

<400> 744

geteceaete eatgaggtat tetacaeeg ceatgteeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaea eecagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggegeeat ggatagagea ggaggggeeg gagtattggg aceggaaeae acagatette aagaeeaaea eacagaetta eegagaagge etgeggaaee tgegeggeta etacaaeeag agegaggeeg ggteteaeae ttggeagaeg atgtatgget gegaeetggg geeegaeggg egeeteetee gegggeatga eeagteegee tacgaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egegeggee agateaeea gegeagggeee gtgtggeega geagetgaa geetaeetgg aggeeetgt egggeetgt egggeeggae acegeggete agateaeea gegeaagtgg gaggeggee gtgtggegga geagetgaag geetaeetgg agggeetgtg egtggagtgg eteegeagat acetggagaa egggaaggag acgetgeage gegegg

<210> 745 <211> 548 <212> DNA <213> Homo sapiens

<220>

<221> misc\_feature <222> (547)..(547)

<223> n is a, c, g, or t

<400> 745

60

120

300

360

420

60

120

300

360

420

480

540

546

180

240

180

240

480

240

480

540

546

gcttcatcgc agtgggctac gtggacgaca cccagttcgt gaggttcgac agcgacgccg	120
cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg	180
accggaacac acagatette aagaccaaca cacagaetta ccgagagage etgeggaace	240
tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct	300
gcgacctggg gcccgacggg cgcctcctcc gcgggcatga ccagttcgcc tacgacggca	360
aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc	420
agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcaggacaga gcctacctgg	480
agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	<b>54</b> 0
gcgcgdna	548

<210> 746

<211> 546

<212> DNA

<213> Homo sapiens

<400> 746

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece 120 getteatege agtgggetae gtggaegaea eecagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatette aagaccaaca cacagaetta cegagagage etgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtacggct 360 gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtacgcc tacgacggca 420 aggattacat egecetgaac gaggacetga geteetggac egeggeggac acegeggete agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 747

<211> 912

<212> DNA

Homo sapiens <213>

<400> 747

60 gggggcagtg gccctgaccg agacctgggc cggctcccac tccatgaggt atttctacac 120 cgccatgtcc cggcccggcc gcggggagcc ccgcttcatc gcagtgggct acgtggacga 180 cacccagttc gtgaggttcg acagcgacgc cgcgagtccg aggacggagc cccgggcgcc 240 atggatagag caggagggc cggagtattg ggaccggaac acacagatct tcaagaccaa 300 cacacagact taccgagaga gcctgcggaa cctgcgcggc tactacaacc agagcgaggc 360 egggteteae ateateeaga ggatgtatgg etgegaeetg gggeeegaeg ggegeeteet 420 ccgcgggcat gaccagtccg cctgcgacgg caaggattac atcgccctga acgaggacet 480 gageteetgg accegeggg acacegegge teagateace eagegeaagt gggaggegge 540 ccgtgtggcg gagcagctga gagcctacct ggagggcctg tgcgtggagt ggctccgcag 600 atacetggag aacgggaagg agacgetgca gegegeggac eecccaaaga cacaegtgac ccaccaccc gtctctgacc atgaggccac cctgaggtgc tgggccctgg gcttctaccc 720 tgcggagatc acactgacct ggcagcggga tggcgaggac caaactcagg acactgagct 780 tgtggagacc agaccagcag gagatagaac cttccagaag tgggcagctg tggtggtgcc 840 ttctggagaa gagcagagat acacatgcca tgtacagcat gaggggctgc cgaagcccct caccetgaga tgggagccat etteccagte caccatecce ategtgggea ttgttgetgg 900 cctggctgtc ct 912

<210> 748

<211> 1012

<212> DNA

<213> Homo sapiens

<400> 748

gagacetggg etggetecca etccatgagg tatttetaca eegecatgte eeggeeegge 1	120
cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc	180
gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg	240
ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag	300
agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca catcatccag	360
aggatgtatg getgegacet ggggceegae gggegeetee teegegggea tgaceagtee	420
gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg	480
gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg	<b>540</b>
agagectace tggagggeet gtgcgtggag tggeteegea gatacetgga gaacgggaag	600
gagacgetge agegegegga ecceecaaag acacaegtga eccaecaece egtètetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca	<b>7</b> 80
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca	900
tetteccagt ceaceatece eategtggge attgttgetg geetggetgt cetageagtt 960	0
gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc ag	1012

<210> 749

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 749

60 atgegggtea eggegeeeg aacegteete etgetgetet ggggggeagt ggeeetgaee 120 egeggggage ecceetteat egeagtggge taegtggaeg acacecagtt egtgaggtte 180 gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg 240 ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag 300 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 360 420 aggatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca tgaccagtcc gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gaeegeggeg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg 540 agagcctacc tggagggcct gtgcgtggag tggctccgca gatacctgga gaacgggaag 600 660 gagacgetge agegegegga ecceecaaag acaeatgtga eccaecacee eatetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagatagaa ccttccagaa gtgggcagct gtggtggtgc cttctggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 750

<211> 546

<212> DNA

<213> Homo sapiens

<400> 750gctcccactc catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc 60 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg 120 cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg 180 accggaacac acagatette aagaceaaca cacagaetta cegagagage etgeggaace 240 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 360 gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc 480 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc **540** gcgcgg 546

240

420

480

540 546

240

780

240

300

600

<210> 751 546 <211> <212> DNA <213> Homo sapiens

<400> 751

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece 120 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatette aagaceaaca cacagaetta eegagagage etgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct 360 gegacetggg geeegaeggg egeeteetee gegggeatga ceagteegee tacgaeggea aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agateaceca gegeaagtgg gaggeggee gtgtggegga geageggaga geetaeetgg agggcctgtg cgtggagtcg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 752 <211> 1017 <212> DNA

<213> Homo sapiens

<400> 752

atgegggtea eggegeeeg aacceteete etgetgetet ggggggeagt ggeeetgaee 60 gagacetggg etggetecea etceatgagg tatttecaea eeteegtgte eeggeeegge 120 cgeggggage ceegetteat eteagtggge taegtggaeg acaeccagtt egtgaggtte 180 gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 gacctgcgga ccctgctccg ctactacaac cagagcgagg ccgggtctca caccatccag aggatgtctg gctgcgacgt ggggccggac gggcgcctcc tccgcgggta taaccagttc 420 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcaggac 540 600 agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacee catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ecaccatece categtggge attgttgetg geetggetgt cetageagtt gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 753

<211> 1017 <212> DNA

<213> Homo sapiens

<400> 753

atgegggtea eggegeeeg aacceteete etgetgetet ggggggeagt ggeeetgace 60 120 gagacetggg etggetecea etceatgagg tatttecaea eeteegtgte eeggeeegge 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 gacetgegga ecetgeteeg etactacaac cagagegagg eegggtetea caccetecag aatatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggta ccaccaggac 420 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgccgcg 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg agagectace tggagggega gtgegtggag tggeteegea gatacetgga gaaegggaag 660 gagacgetge agegegegga cececcaaag acacaegtga eccaecaece catetetgae

catgaggcca cectgaggtg etgggecetg ggettetace etgeggagat cacactgace 720
tggcageggg atggegagga ceaaacteag gacactgage ttgtggagae cagaceagea 780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agageagaga 840
tacacatgce atgtacagea tgaggggetg eegaageeee teaceetgag atgggageeg 900
tetteceagt ceacegteee categtggge attgttgetg geetggetgt eetageagtt 960
gtggteateg gagetgtggt egetgetgt atgtgtagga ggaagagete aggtgga 1017

<210> 754

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 754

60 atgegggtea eggegeeeg aacceteete etgetgetet ggggggeagt ggeeetgace 120 gagacetggg etggetecca etceatgagg tatttecaea ecteegtgte eeggeeegge 180 egeggggage eeegetteat eteagtggge taegtggaeg acaeeeagtt egtgaggtte 240 gacagegacg cegegagtee gaggaeggag ceeegggege egtggataga geaggagggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 gacctgcgga ccctgctccg ctactacaac cagagcgagg ccgggtctca caccatccag 420 aggatgtetg getgegaegt ggggeeggae gggegeetee teegegggta taaccagtte 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeggeg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcaggac 600 agageetace tggagggeae gtgegtggag tggeteegea gacacetgga gaacgggaag gagacgetge agegegegga ecceecaaag acaeatgtga eccaecacee eatetetgae 660 720 catgaggeea ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 755

<211> 619

<212> DNA

<213> Homo sapiens

<400> 755

60 atgcgggtca cggcgcccg aaccetecte etgetgetet ggggggcagt ggccetgace 120 gagacetggg etggetecca etceatgagg tatttecaea eeteegtgte eeggeeegge 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacccagtt cgtgaggttc 240 gacagegacg cegegagtee gaggaeggag ceeegggege egtggataga geaggaggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 gacctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccatccag 420 aggatgtctg getgegaegt ggggeeggae gggegeetee teegegggta taaccagtte gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcaggac 540 agagcetace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 600 619 gagacgctgc agcgcgcgg

<210> 756

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 756

cgcggggage cccgcttcat ctcagtggge tacgtggacg acacgcagtt cgtgaggttc	180
gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg	240
ccggaatatt gggaccggaa cacacagatc tgcaagacca acacacagac ttaccgagag	300
aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccgggtctca caccctccag	360
aggatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagttc	420
gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg	480
gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg	<b>54</b> 0
agaacctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag	600
gagacgetge agegegegga ecceecaaag acacatgtga eccaecaece catetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca	780
ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca	900
tetteccagt ecacegtece categtggge attgttgetg geetggetgt ectageagtt 96	80
gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga	1017

<210> 757

<211> 1017

<212> DNA

<213> Homo sapiens

<400>

atgetggtea tggegecceg aaccgtecte etgetgetet eggeggeeet ggeeetgace 60 120 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggaatatt gggaccggaa cacacagatc tgcaagacca acacacagac ttaccgagag 300 aacctgcgca ccgcgctccg ctactacaac cagagcgagg ccgggtctca caccctccag 360 420 aggatgtacg getgegacgt ggggceggac gggegeetee teegegggea taaccagtte 480 geetacgacg geaaggatta categeeetg aacgaggace tgageteetg gacegeggeg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 600 agaacctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acaeatgtga eccaecaece eatetetgae catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 840 ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteceagt ceaeegteec categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga

240

<210> 758

<211> 546

<212> DNA

<213> Homo sapiens

<400> 758

geteceaete eatgaggtat ttetaeaeet eegtgteeeg geeeggeege ggggageeee 60 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg 120 180 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gaatattggg accggaacac acagatetge aagaccaaca cacagaetta ccgagagaac ctgcgcaccg 240  ${\tt cgctccgcta\ ctacaaccag\ agcgaggccg\ ggtctcacac\ cctccagagg\ atgtacggct}$ 300 360 gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagttcgcc tacgacggca 420 aggattacat cgccctgaac gaggacctga gctcctggac agcggcggac accgcggctc 480 agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga acctacctgg **540** agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcgcgg

<210> 759 <211> 546 <212> DNA <213> Homo sapiens <400> 759 60 geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageeec 120 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg 180 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gaatattggg 240 accgggagac acagatetec aagaceaaca cacagactga ccgagagage etgegeaccg 300 egeteegeta etacaaccag agegaggeeg ggteteacae eeteeagagg atgtaegget 360 gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagttcgcc tacgacggca 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga acctacctgg 480 540 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcgcgg <210> 760 <211> 546 <212> DNA <213> Homo sapiens 60 <400> 760gctcccactc catgaggtat ttctacacct ccgtgtcccg gcccggccgc ggggagcccc 120 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg 180 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accgggagac acagatetge aagaceaaca cacagaetta eegagagaac etgegeaccg 240300 cgctccgcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 360 gegaegtggg geeggaeggg egeeteetee gegggeataa eeagttegee taegaeggea aggattacat egecetgaac gaggacetga geteetggac egeggeggac acegeggete 420 480 agatcaccca gegcaagtgg gaggeggccc gtgtggegga geagetgaga acctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 546 gcgcgg <210> 761 <211> 822 <212> DNA <213> Homo sapiens <400> 761 60 geteceacte catgaggtat ttetacaceg cegtgteeeg geeeggeege ggggageeee 120 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg 180 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gaatattggg 240 accggaacac acagatetge aagaccaaca cacagactta eegagagaac etgeggateg 300

getteatete attgaggata vietateteg eegtgeeste gaaggatega gagggaggatee getteatete agtgggetae gtgggacgaea egeagttegt gaggttegae agegaegeeg egagteegag agaggageeg egggegeegt ggatagagea ggaggggeeg gaatattggg aceggaacae acagatetge aagaceaaea cacagaetta eegagagaae etgeggateg egeteegeta etacaaecag agegaggeeg ggteteaeae eeteeagagg atgtaegget gegaegtggg geeggaeggg egeeteetee gegggeataa eeagttegee tacgaeggea aggattaeat egeeetgaae gaggaeetga geteetgae egeggeggae acegeggete agateaecaa gegeaagtgg gaggeggeee gtgtggegga geagetgaga acetaeetgg agggeaegtg egtggagtgg eteegeagat acetggagaa egggaggaga acetaeetgg agggeaece eeaaagaea eatgtgaeee aceaeceeat etetgaeeat gaggeeaece tgaggtgetg ggeeetggge ttetaeeetg eggagateae acetgaeetgg eagegggatg gegaggaeea aacteaggae acegagettg tggagaeea aceageagga gacagaaeet teeagaagtg ggeagetgtg gtggtgeett etggagaaea geagagatae acatgeeatg

tacagcatga ggggctgccg aagcccctca ccctgagatg gg

360

420

600 660

480 540

720

780 822

<210> 762 <211> 546

<212> DNA

#### <213> Homo sapiens

<400> 762

60 geteceacte catgaggtat ttetacacet eegtgteeeg geeeggeege ggggageeee 120 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg 180 cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg 240 accggaacac acagatette aagaccaaca cacagactta ccgagagaac ctgcggatcg 300 cgctccgcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagttcgcc tacgacggca 360 aggattacat egecetgaac gaggacetga geteetggac egeggeggac acegeggete 420 480 agatcaccca gegcaagtgg gaggeggccc gtgtggegga geagetgaga acetacetgg 540 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcgcgg

<210> 763

<211> 546

<212> DNA

<213> Homo sapiens

<400> 763

geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg ggatattggg accggaacac acagatette aagaccaaca cacagaetta eegagagaac etgeggateg cgctccgcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gegeaagtgg gaggeggece gtgtggegga geagetgaga acctacetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

60

120

300

360

420

480

540 546

180

240

480 540

546

180

240

<210> 764

<211> 546

<212> DNA

<213> Homo sapiens

### <400> 764

geteceacte catgaggtat ttetacacet cegtgteeeg geceggeege ggggageece 60 120 gcttcatctc agtgggctac gtggacgaca cgcagttcgt gaggttcgac agcgacgccg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gaatattggg accggaacac acagatetge aagaccaaca cacagactta ccgagagaac etgegcaccg 300 cgctccgcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 360 gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagttcgcc tacgacggca 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agateaceca gegeaagtgg gaggeggeec gtgtggegga geagetgaga acetacetgg agggcatgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 765

548 <211>

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature <222> (547)..(547)

240

480

540

548

<223> n is a, c, g, or t

<400> 765

geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageeee 60 getteatete agtgggetae gtggacgaea egeagttegt gaggttegae agegaegeeg 120 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gaatattggg accggaacac acagatetge aagaceaaca cacagactta cegagagaac etgeggateg cgctccgcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 300 gegacgtggg geeggaeggg egeeteetee gegggeataa eeagttegee taegaeggea 360 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggag accgcggctc agateaceca gegeaagtgg gaggeggeee gtgtggegga geagetgaga acetacetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgdna

<210> 766 <211> 1017

<212> DNA

<213> Homo sapiens

<400> 766

60 atgetggtea tggegeeceg aaccgteete etgetgetet eggeggeeet ggeeetgace 120 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc 240 gacagegaeg cegegagtee gagagaggag cegegggege egtggataga geaggagggg ccggaatatt gggaccggaa cacacagatc tgcaagacca acacacagac tgaccgagag 300 360 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 420 aggatgtacg getgegacgt ggggeeggac gggegeetee teegegggea taaccagtte gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gaeegeggeg 480 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 600 agaacetace tggagggcae gtgcgtggag tggctccgca gatacetgga gaacgggaag gagacgetge agegeggga ecceecaaag acacatgtga eccaecacce catetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccetgag atgggagcca tetteccagt ceaeegteec categtggge attgttgetg geetggetgt cetageagtt 960 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga 1017

<210> 767

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 767

60 atgetggtea tggegeeeeg aacegteete etgetgetet eggeggeeet ggeeetgaee 120 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggaatatt gggaccggaa cacacagatc tgcaagacca acacacagac tgaccgagag 300 360 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 420 aggatgtacg getgegaegt ggggeeggae gggegeetee teegegggea taaceagtte 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 600 agaacctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 660 gagacgctgc agegegegga ccccccaaag acacatgtga cccaccaccc catctctgac 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840

900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tcttcccagt ccaccgtccc catcgtgggc attgttgctg gcctggctgt cctagcagtt gtggtcatcg gagetgtggt egetgetgtg atgtgtagga ggaagagete aggtgga 1017

<210> 768

<211> 546

<212> DNA

<213> Homo sapiens

<400> 768

60 geteceacte catgaggtat ttetacacet cegtgteceg geeeggeege ggggageece 120 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggcca gaatattggg accggaacac acagatetge aagaceaaca cacagactga eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 300 360 gegaegtggg geeggaeggg egeeteetee gegggeataa eeagttegee tacgaeggea 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc 480 agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga acctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

180

240

540

546

240

<210> 769

1017 <211>

<212> DNA

<213> Homo sapiens

<400> 769

atgctggtca tggcgcccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc 60 120 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc 180 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggaatatt gggaccggga gacacagatc tccaagacca acacacagac tgaccgagag agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caceeteeag 360 420 aggatgtacg getgegacgt ggggeeggae gggegeetee teegegggea taaccagtte 480 gcctacgacg gcaaggatta categeectg aacgaggace tgageteetg gacegeggeg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 agaacctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 600 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacee catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteceagt ceacegtece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 770

1017 <211>

DNA <212>

<213> Homo sapiens

<400> 770atgctggtca tggcgccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc 60 120 gagacetggg ceggetecea etecatgagg tatttetaca ceteegtgte eeggeeegge 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc 240 gacagegacg cegegagtee gagagaggag cegegggege egtggataga geaggagggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac tgaccgagag agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag 360 aggatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagttc 420

gcctacgacg gcaaggatta categeectg aacgaggace tgageteetg gacegeggeg	480
gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg	540
agaacctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag	600
gagacgetge agegegegga ecceccaaag acacatgtga eccaccacce catetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca	780
ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca	900
	30
gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga	1017

<210> 771<211> 993

<212> **DNA** 

<213> Homo sapiens

### <400> 771

gteeteetge tgetetegge ggeeetggee etgacegaga eetgggeegg etceeaetee 60 atgaggtatt tetacaecte egtgteeegg eeeggeegeg gggageeeeg etteatetea 120 gtgggctacg tggacgacac gcagttcgtg aggttcgaca gcgacgccgc gagtccgaga 180 gaggagccgc gggcgccgtg gatagagcag gaggggccgg aatattggga ccggaacaca cagatetgea agaceaacae acagaetgae egagagagee tgeggaacet gegeggetae 300 tacaaccaga gcgaggccgg gtctcacacc ctccagagca tgtacggctg cgacgtgggg 360 420 eeggaegge geeteeteeg egggeataac eagttegeet aegaeggeaa ggattacate gccctgaacg aggacctgag ctcctggacc gcggcggaca ccgcggctca gatcacccag 480 cgcaagtggg aggcggcccg tgtggcggag cagctgagaa cctacctgga gggcacgtgc 540 600 gtggagtggc tccgcagata cctggagaac gggaaggaga cgctgcagcg cgcggacccc ccaaagacac atgtgaccca ccaccccatc tctgaccatg aggccaccct gaggtgctgg 660 gccctgggct tctaccctgc ggagatcaca ctgacctggc agcgggatgg cgaggaccaa 720 actcaggaca ccgagcttgt ggagaccaga ccagcaggag acagaacctt ccagaagtgg 780 gcagetgtgg tggtgcette tggagaagag cagagataca catgccatgt acagcatgag 840 gggctgccga agcccctcac cctgagatgg gagccatctt cccagtccac cgtccccatc 900 gtgggcattg ttgctggcct ggctgtccta gcagttgtgg tcatcggagc tgtggtcgct 960 gctgtgatgt gtaggaggaa gagttcaggt ggå 993

240

<210> 772

<211> 1017

<212> DNA

<213> Homo sapiens

# <400> 772

atgctggtca tggcgccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc 60 120 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 240 ccggaatatt gggaccggaa cacacagatc tgcaagacca acacacagac tgaccgagag 300 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 360 aggatgtacg getgegacgt ggggeeggae gggegeetee teegegggea taaccagtte 420 gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeggeg 480 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 agaacctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 600 gagacgetge agegegega ecceecaaag acacatgtga eccaecace catetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagacagaa ccttccagaa gtgggcagct gtggtggtgc cttctggaga agagcagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 960 tetteceagt ceaeegtece eategtggge attgttgetg geetggetgt eetageagtt gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga 1017

<210> 773 <211> 1017 <212> DNA <213> Homo sapiens

<400> 773

60 atgctggtca tggcgccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc 120 180 egeggggage ecegetteat eteagtggge taegtggaeg acaegeagtt egtgaggtte 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggaatatt gggaccggaa cacacagatc tgcaagacca acacacagac ttaccgagag agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 360 aggatgtacg getgegaegt ggggeeggae gggegeetee teegegggea taaccagtte 420 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 600 agaacctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 660 gagacgetge agegegegga cececeaaag acacatgtga cecaceacec catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 840 ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgce atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca tetteceagt ceaeegtece categtggge attgttgetg geetggetgt cetageagtt 960 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga

<210> 774 <211> 1017 <212> DNA <213> Homo sapiens

## <400> 774

atgetggtea tggegeeeeg aacegteete etgetgetet eggeggeeet ggeeetgaee 60 gagacetggg eeggeteeca etecatgagg tatttetaca eeteegtgte eeggeeegge 120 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggaatatt gggaccggaa cacacagatc tgcaagacca acacacagac tgaccgagag 360 agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caettggeag 420 acgatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagttc 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg gacaccgegg etcagateae ecagegeaag tgggaggegg ecegtgtgge ggageagetg 540 600 agaacctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 660 gagacgetge agegegegga cececeaaag acacatgtga cecaceacee catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 840 ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ceaeegtece eategtggge attgttgetg geetggetgt eetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga

<210> 775 <211> 1017 <212> DNA <213> Homo sapiens

# <400> 775

atgetggtca tggegececg aacegteete etgetgetet eggeggeeet ggeeetgace 60 gagacetggg eeggeteea etceatgagg tatttetaca eeteegtgte eeggeeegge 120 egeggggage eeggeteat etcagtggge taegtggaeg acaeggagt egtgaggtte 180 gacagegaeg eegegggtee gagagagggg 240

ccggaatatt gggaccggaa cacacagate tgcaagacca acacacagae tgaccgagag agcetgegga acetgegeg etactacaac cagagegagg cegggtetea caettggeag acgatgtatg getgegacgt ggggecegae gggegeetee teegegggea taaccagtte geetacgaeg geaaggatta categeeetg aacgaggace tgageteetg gaccgeggeg gacacegegg etcagateae ceagegeaag tgggaggegg ecegtgtgge ggageagetg agaacetace tggagggeae gtgegtggag tggeteega gatacetgga gaacgggaag gagacgetge agegegegga eceeccaaag acacatgtga eceaceaece catetetgae catgaggeca ecetgaggtg etgggeettetaee etgeggagat cacactgaee tggeagegg atggeggga ceaaacteag gacacegage ttgtggagae cagaccagea	300 360 420 480 540 600 660 720 780
	0
ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacatgce atgtacagca tgaggggetg eegaageeee teaceetgag atgggageea	840 900
tetteccagt ceacegtece categtggge attgttgetg geetggetgt cetageagtt gtggtcateg gagetgtggt egetgetgt atgtgtagga ggaagagtte aggtgga	60 1017

<210> 776

<211> 413

<212> DNA

<213> Homo sapiens

## <400> 776

ggttegacag egacgeegeg agteegagag aggageegeg ggegeegtgg atagageagg aggggccgga atattgggac cggaacacac agatctgcaa gaccaacaca cagacttacc 120 gagagagect geggaacetg egeggetaet acaaceagag egaggeeggg teteacacee 180 240 tccagaggat gtacggctgc gacgtggggc cggacgggcg cctcctccgc gggcatgacc 300 agtccgccta cgacggcaag gattacatcg ccctgaacga ggacctgagc tcctggaccg cggcggacac cgcggctcag atcacccagc gcaagtggga ggcggcccgt gtggcggagc 360 agctgagaac ctacctggag ggcacgtgcg tggagtggct ccgcagatac ctg 413

60

<210> 777

<211> 1017

<212> DNA

<213> Homo sapiens

# <400> 777

60 atgctggtca tggcgccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc 120 gagacetggg ceggetecea etceatgagg tatttetaea ceteegtgte eeggeeegge 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggaatatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 300 360 agectgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag  $aggatgtacg\ gctgcgacgt\ ggggccggac\ gggcgcctcc\ tccgcgggca\ taaccagttc$ 420 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagcgg 600 agaacctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacce catetetgae 720 catgaggeca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 840 ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ceacegtece categtggge attgttgetg geetggetgt cetageagtt gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga 1017

<sup>&</sup>lt;210> 778

<sup>&</sup>lt;211> 1017

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

60

960 1017

<400> 778	
atgetggtea tggegeeceg aaccgteete etgetgetet eggeggeect ggeeetgace	60
	120
cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc	180
gacagegaeg cegegagtee gagagaggag cegegggege egtggataga geaggagggg	240
ccggaatatt gggaccggaa cacacagatc tgcaagacca acacacagac tgaccgagag	300
agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag	360
aggatgtctg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagttc	420
gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg	480
gacaccgegg ctcagatcac ccagegeaag tgggaggegg cccgtgtgge ggagcagetg	<b>54</b> 0
agaacctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag	600
gagacgetge agegegegga ecceecaaag acacatgtga eccaecace catetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca	780
ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840

tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca tcttcccagt ccaccgtccc catcgtgggc attgttgctg gcctggctgt cctagcagtt

gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga

<210> 779 <211> 1017 <212> DNA <213> Homo sapiens

<400> 779

60 atgetggtea tggegeeeeg aacegteete etgetgetet eggeggeeet ggeeetgaee 120 gagacetggg eeggeteeca etceatgagg tatttetaca eeteegtgte eeggeeegge 180 egeggggage ecceetteat etcagtggge taegtggaeg acaegeagtt egtgaggtte 240 gacagegaeg cegegagtee gagagaggag cegegggege egtggataga geaggagggg 300 ccggagtatt gggaccggaa cacacagatc tacaagacca acacacagac tgaccgagag 360 agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caceeteeag 420 aggatgtacg getgegaegt ggggeeggae gggegeetee teegegggea taaccagtte 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 600 agaacctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecace catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 840 ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca tetteceagt ceacegteec categtggge attgttgetg geetggetgt cetageagtt gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga 1017

<210> 780 <211> 677 <212> DNA <213> Homo sapiens

780tacacctccg tgtcccggcc cggccgcggg gagccccgct tcatctcagt gggctacgtg gacgacacgc agttcgtgag gttcgacagc gacgccgcga gtccgagaga ggagccgcgg 120 180 gcgccgtgga tagagcagga ggggccggaa tattgggacc ggaacacaca gatctgcaag 240 accaacaca agacttaccg agagagcctg cggaacctgc gcggctacta caaccagagc 300 gaggccggt ctcacaccct ccagaggatg tacggctgcg acgtggggcc ggacgggcgc 360 ctcctccgcg ggcataacca gttcgcctac gacggcaagg attacatcgc cctgaacgag 420 gacctgaget cetggacege ggeggacace geggeteaga teacceageg caagtgggag geggeeegtg tggeggagea geggagaace tacetggagg geaegtgegt ggagtggete 480 cgcagatacc tggagaacgg gaaggagacg ctgcagcgcg cggacccccc aaagacacat 540 gtgacccacc accccatctc tgaccatgag gccaccctga ggtgctgggc cctgggcttc 600

660 taccetgegg agateacact gacetggeag egggatggeg aggaceaaac teaggacace gagcttgtgg agaccag 677

<210> 781 <211> 546 <212> DNA Homo sapiens <213>

<400> 781

geteceacte catgaggtat ttegacaceg cegtgteeeg geeeggeege ggagageece getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gaatattggg accggaacac acagatetge aagaccaaca cacagactga eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga acctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 782 <211> 546 <212> DNA Homo sapiens <213>

<400> 782

geteceacte catgaggtat ttetacacet eegtgteeeg geeeggeege ggggageece 60 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg 120 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggagggccg gagtattggg accgggagac acagatetec aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gegacgtggg geeggacggg egeeteetee gegggeataa eeagttegee tacgacggea aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga acctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

180

240

60

120

300

360 420

480

540

546

180

240

783 <210> <211> 546 <212> DNA <213> Homo sapiens

<400>

geteceacte catgaggtat ttetacacet cegtgteceg geeeggeege ggggageece 60 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggagggccg gaatattggg accggaacac acagatetge aagaccaaca cacagactga ccgagagage ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gegeaagtgg gaggeggeec gtgtggegga geagetgaga acetacetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

180

240

120

300

546

<210> 784 <211> 546 <212> DNA

<213> Homo sapiens

<400> 784

60 geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageece 120 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gaatattggg accggaacac acagatetge aagaccaaca cacagactga eegagagage etgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 360 gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagttcgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc 420 agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga acctacctgg 480 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 785

<211> 546

<212> DNA

<213> Homo sapiens

<400> 785

geteceacte catgaggtat ttetacacet eegtgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acagatetac aagaccaaca cacagactga ccgagagagc etgeggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccacagg atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga acctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 786

<211> 619

<212> DNA

<213> Homo sapiens

<400> 786

60 atgctggtca tggcgccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc 120 gagacetggg ceggetecea etceatgagg tatttetaca ceteegtgte eeggeeegge 180 egeggggage eeegetteat eteagtggge taegtggaeg acaegcagtt egtgaggtte gacagegaeg cegegagtee gagagaggag cegegggege egtggataga geaggaggg ceggagtatt gggaceggaa cacacagate tacaagacea acacacagae tgacegagag 360 agcetgegga acetgegegg etactacaac cagagegagg eegggtetea eaceetecag aggatgtacg getgegaegt ggggeeggae gggegeetee teegegggta taaccagtta 420 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg agaacctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 600 gagacgctgc agcgcgcgg

<210> 787

<211> 546

<212> **DNA** 

<213> Homo sapiens

<400> 787

180

240

540 546

60 120

180

240 300

360

420

480

540

546

240

619

	-	310 / 702		
t t	egagtece accggaa tgegegge gegaegte aggattae aggateac	te agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg gag agaggageeg egggegeegt ggatagagea ggaggggeeg gaatattggg eac acagatetge aagaceaaca cacagaetga eegagagge etgeggaace eta etacaaceag agegaggeeg ggteteacae eetecagagg atgtaegget ggg geeggaeggg egeeteetee gegggeataa eeagttegee taegaeggea eat egeeetgaae gaggaeetga geteetggae egeggegae aeggeggete eea gegeaagtgg gaggeggeee gtgaggegga geagtggaga acetaeetgg gtg egtggagtgg eteegeagat acetggagaa egggaaggag	120 180 240 300 360 420 480 540 546	
•	<210> <211> <212> <213>	788 546 DNA Homo sapiens		
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	getteate egagteeg aceggaa tgegegge gegaegt aggatta agateac	788 tte catgaggtat ttetacacet eegtgteeeg geeeggeege ggggageeee te agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg gag gaeggageee egggegeeat ggatagagea ggaggggeeg gagtattggg eac acagatetge aagaceaaca cacagaetga eegagagge etgeeggaace eta etacaaceag agegaggeeg ggteteacac cetecagagg atgtaegget ggg geeggaeggg egeeteetee gegggeataa eeagttegee tacgaeggea eat egeeetgaae gaggaeetga geteetggae egegeggae acegeggete eca gegeaagtgg gaggegeee gtgtggeaga geagetgaga acetacetgg egtg egtggagtgg eteegeagat acetggagaa egggaaggag egtg	60 120 180 240 300 360 420 480 540 546	
	<210><211><211><212><213>	789 546 DNA Homo sapiens		
	getteate egagtee aceggaa tgegegg gegaegt aggatta agateae	cte catgaggtat ttetacacet eegtgteeeg geeeggeege ggggageeee ete catgaggtat ttetacacet eegtgteeeg geeeggeege ggggageeee ete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg gag agaggggeeg egggeeegt ggatagagea ggaggggeeg gagtattggg leac acagatetae aagaceaaca cacagaetta eegaggaac etgeeggaace eta etacaaceag agegaggeeg ggteteacac eetecagagg atgtaegget ggg geeggaeggg egeeteetee gegggeataa eeagttegee tacgaeggea eeat egeeetgaac gaggaeetga geteetggae egegeggee eeca gegeaagtgg gaggeegee gtgtggegga geagetgaga acetacetgg egtg egtggagtgg eteegeagat acetggagaa egggaaggag eggtgeage egtggaggag eegtgagga acetgeage	60 120 180 240 300 360 420 480 540 546	
	<210><211><211><212><213>	790 546 DNA Homo sapiens		
	cgagtco accggga tgcgcgg gcgacgt	790gctcccactc catgaggtat ttctacacct ccgtgtcccg gcccggccgc gggctc agtgggctac gtggacgaca cgcagttcgt gaggttcgac agcgacgccg gag agaggagccg cgggcgccgt ggatagagca ggaggggccg gaatattgggagac acagatctgc aagaccaaca cacagactga ccgagagagc ctgcggaacc cta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct cggg gccggacggg cgcctcctcc gcgggcataa ccagttcgcc tacgacggca acat cgccctgaac gaggacctga gctcctggac cgcggcgac accgcggctc	120	60

aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga acctacctgg

agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 546 gcgcgg 791 <210> <211> 546 <212> **DNA** <213> Homo sapiens <400> 791 60 geteceacte catgaggtat ttetacacet cegtgteceg geeeggeege ggggageece 120 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg 180 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accgggagac acagatetec aagaccaaca cacagactga ccgagagagc ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 300 gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagttcgcc tacgacggca 360 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc 480 agateaeceg gegeaagtgg gaggeggeee gtgtggegga geagetgaga acetaectgg 540 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcgcgg <210> 792 <211> 1017 <212> **DNA** <213> Homo sapiens <400> 60 atgetggtea tggegeeeeg aacegteete etgetgetet eggeggeeet ggeeetgaee 120 gagacctggg ccgctccca ctccatgagg tatttctaca cctccgtgtc ccgcccggc 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 300 ceggaatatt gggaceggaa cacacagate tgeaagacea acacacagae tgacegagag agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 360 agcacgtacg getgegacgt ggggccggac gggcgcctcc teegegggca taaccagtte 420 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 600 agaacctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag gagacgetge agegegegga ecceecaaag acaeatgtga eccaecacee catetetgae 660 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 840 ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ceaecgtece categtggge attgttgetg geetggetgt eetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga <210> 793 <211> 546 <212> DNA <213> Homo sapiens <400> 793 geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageece 60 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg 120 180 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggagggccg gaatattggg 240 accggaacac acagatetge aagaccaaca cacagactga eegagagage etgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 360 gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagttcgcc tacgacggca

aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc

300

360

420

480

540

546

240

180

240

480 agateaceca gegeaagtgg gaggeggeee ttgtggegga geagetgaga acetacetgg 540 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcgcgg

<210> 794

<211> 546

<212> DNA

<213> Homo sapiens

#### <400> 794

60 geteceacte catgaggtat ttetacacet eegtgteeeg geeeggeege ggggageeec getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gaatattggg accggaacac acagatetge aagaccaaca cacagactga cegagtgage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gegacgtggg geeggacggg egeeteetee gegggeataa eeagttegee tacgacggea aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gegeaagtgg gaggeggeec gtgtggegga geagetgaga acetacetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 795

1017 <211>

<212> DNA

<213> Homo sapiens

#### <400> 795

60 atgcgggtca cggcaccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc gagacetggg egggetecca etceatgagg tatttecaea eegecatgte eeggeeegge 120 180 cgeggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag agectgegga acctgegegg etactacaac cagagegagg eegggtetea caccetecag 360 420 aggatgtacg getgegacgt ggggeeggac gggegeetee teegegggea taaccagtac 480 gcctacgacg gcaaggatta catcgccetg aacgaggacc tgcgctcctg gaccgccgcg gacacggcgg ctcagatctc ccagcgcaag ttggaggcgg cccgtgtggc ggagcagctg 540 agagcetace tggagggega gtgcgtggag tggctccgca gatacetgga gaacgggaag 600 660 gacaagetgg agegetga ecceecaaag acacaegtga eccaecacee catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggtttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgee atgtacagca tgaggggetg eegaageeee teaceetgag atgggageeg 960 tetteccagt ccaccgtece categtggge attgttgetg gcetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga

<210> 796

<211> 1017

<212> DNA

<213> Homo sapiens

#### <400> 796

60 atgcgggtca cggcaccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc 120 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc 240 gacagegaeg ccaegagtee gaggaaggag cegegggege catggataga geaggaggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag

120

300 360

420

660

480

540

720 780

822

240

600

780

180

240

aggatgtacg getgegaegt ggggeeggae gggegeetee teegegggea taaccagtae	420
gcctacgacg gcaaggatta categeeetg aacgaggace tgegeteetg gacegeegeg	480
gacacggegg ctcagatctc ccagcgcaag ttggaggegg cccgtgtggc ggagcagctg	<b>54</b> 0
agagcetace tggagggega gtgcgtggag tggctccgca gatacetgga gaacgggaag	600
gacaagetgg agegegetga ecceecaaag acacaegtga eccaecacee eatetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggtttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg	900
	60
gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga	1017

<210> 797 <211> 822

<212> **DNA** 

<213> Homo sapiens

<400>

geteceacte catgaggtat ttecacaceg ceatgteeeg geeeggeege ggggageece getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gegacgtggg geeggaeggg egeeteetee gegggeataa ceagtaegee tacgaeggea aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc agatetecca gegeaagttg gaggeggeee gtgtggegga geagetgaga geetaeetgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc 600 gegetgacce eccaaagaca caegtgacce accaececat etetgaccat gaggecacee tgaggtgctg ggccctgggt ttctaccctg cggagatcac actgacctgg cagcgggatg gegaggacca aacteaggac aetgagettg tggagaccag accageagga gatagaacet tecagaagtg ggeagetgtg gtggtgeett etggagaaga geagagatae acatgeeatg tacagcatga ggggctgccg aagcccctca ccctgagatg gg

<210> 798 <211> 1017

<212> DNA

<213> Homo sapiens

<400> 798

60 atgcgggtca cggcgcccg aaccetecte etgetgetet ggggggcagt ggccetgace 120 gagacetggg etggetecea etceatgagg tatttecaea eetcegtgte eeggeeegge 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 agectgegga acetgegegg etaetacaac cagagegagg eegggtetea caccetecag agcatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagtac 420 480 gectaegaeg geaaggatta categeeetg aacgaggaee tgegeteetg gaeegeegeg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 agagectace tggagggega gtgcgtggag tggeteegea gatacetgga gaaegggaag 660 gagacgetge agegegegga ecceecaaag acacaegtga eccaecaece catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 960 tetteccagt ceaeegtece categtggge attgttgetg geetggetgt ectageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 799 <211> 1017 <212> DNA <213> Homo sapiens

<400> 799

60 atgcgggtca cggcgccccg aaccetecte etgetgetet gggggggagt ggccctgace 120 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc 240 gacagegacg ceaegagtee gaggaaggag cegegggege catggataga geaggaggg ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 300 360 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag agcatgtacg getgegacgt ggggccggac gggcgcetec teegegggca tgaccagtec 420 480 gectacgacg geaaggatta categeeetg aacgaggace tgegeteetg gacegeegeg 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 600 agagcetace tggagggega gtgcgtggag tggctccgca gatacetgga gaacgggaag 660 gagacgetge agegegegga cececeaaag acacaegtga cecaceaece catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg  $tetteccagt\ ccacegtecc\ categtggge\ attgttgetg\ gcetggetgt\ cctageagtt$ 960 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 800 <211> 1017 <212> DNA <213> Homo sapiens

<400> 800atgcgggtca cggcgccccg aaccetecte etgetgetet ggggggcagt ggccetgace gagacetggg etggetecca etceatgagg tatttecaea ecteegtgte eeggeeegge 120 180 cgeggggage cccgcttcat caccgtggge tacgtggacg acacgctgtt cgtgaggttc gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg 240 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 ageetgegga acetgegegg etactacaac cagagegagg eegggtetca catcatecag 420 aggatgtatg gctgcgacct ggggccggac gggcgcctcc tccgcgggca taaccagtac gectaegaeg geaaggatta categeeetg aacgaggaee tgegeteetg gaeegeegeg 480 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 600 agageetace tggagggega gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acacaegtga eccaecacee catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 960 tetteceagt ceaeegtece eategtggge attgttgetg geetggetgt eetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

60

<210> 801 <211> 1017 <212> DNA <213> Homo sapiens

<400> 801

agectgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag	360
agcatgtacg getgegacgt ggggceggac gggegeetee teegegggea taaccagtac	420
gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgccgcg	480
gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg	<b>54</b> 0
agagectace tggagggeet gtgcgtggag tggeteegea gatacetgga gaacgggaag	600
gagacgetge agegegegga ccccccaaag acacaegtga cccaccaece catetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg	900
tetteccagt ceaeegtece eategtggge attgttgetg geetggetgt cetageagtt 90	60
gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga	1017

802 <210>

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 802

60 atgegggtea eggegeeeg aacceteete etgetgetet ggggggeagt ggeeetgaee 120 gagacetggg etggetecca etceatgagg tatttecaea eeteegtgte eeggeeegge 180 egeggggage ecceptteat eacegtggge taegtggaeg acaegetgtt egtgaggtte 240 gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggaggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag agectgegga acetgegegg etactacaac cagagegagg eegggtetea eaettggeag 360 420 acgatgtatg getgegaegt ggggeeggae gggegeetee teegegggea taaceagtae gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgccgcg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 600 agagcctacc tggagggcga gtgcgtggag tggctccgca gatacctgga gaacgggaag gagacgetge agegegegga cececcaaag acacaegtga eccaecacee catetetgae 660 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggeaget gtggtggtge ettetggaga agageagaga tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 900 960 tetteceagt ceaeegtece eategtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 803

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 803

atgegggtea eggeaceeg aacegteete etgetgetet eggeggeeet ggeeetgace 60 120 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc 180 gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg ccggagtatt gggaccggga gacacagatc ttcaagacca acacacagac ttaccgagag 300 agectgegga acctgegegg etactacaac cagagegagg eegggtetea caecetecag 360 aggatgtacg getgegacgt ggggeeggac gggegeetee teegegggea taaccagtac 420 gectacgacg geaaggatta categeeetg aacgaggace tgegeteetg gacegeegeg 480 gacacggcgg ctcagatctc ccagcgcaag ttggaggcgg cccgtgtggc ggagcagctg 540 600 agageetace tggagggega gtgegtggag tggeteegea gatacetgga gaacgggaag gacaagetgg agegegetga ecceecaaag acacaegtga eccaecacee catetetgae 660 720 catgaggcca ccctgaggtg ctgggccctg ggtttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 900

 $tetteceagt\ ceacegteee\ categtggge\ attgttgetg\ geetggetgt\ cetageagtt$ gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga 960 1017

120

300

120

300 360

420

180

240

360 420

480

540

546

180

240

<210> 804 <211> 1017 <212> DNA

<213> Homo sapiens

<400> 804

atgegggtea eggegeeeg aacceteete etgetgetet gggggggagt ggeeetgaee 60 120 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc 180 gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg 240 ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag 300 360 agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag agcatgtacg getgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagtac 420 gcctacgacg gcaaggatta categeeetg aacgaggace tgegeteetg gacegeegeg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg **54**0 agagcetace tggagggega gtgcgtggag tggeteegca gatacetgga gaacgggaag 600 gagacgetge agegegegga ecceecaaag acacaegtga eccaecace catetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agageagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 900 tetteceagt ceaeegteec categtggge attgttgetg geetggetgt eetageagtt 960 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 805

546 <211>

<212> DNA

<213> Homo sapiens

<400> 805

geteceacte catgaggtat ttecacacet cegtgteeeg geeeggeege ggggageeee 60 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggtatga ccagtacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc agatcaccca gegeaagtgg gaggeggeec gtgtggegga geagetgaga geetacetgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 806

<211> 546

<212> DNA

<213> Homo sapiens

<400> 806

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece 60 getteatege agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc

agatetecca gegeaagttg gaggeggeee gtgtggegga geagetgaga geetacetgg agggegagtg egtggagtgg eteegeagat acetggagaa egggaaggae aagetggage gegetg  480 540 546
<210> 807 <211> 546 <212> DNA <213> Homo sapiens
<400> 807 geteceaete catgaggtat ttecaeacet eegtgteeg geeeggeege ggggageece getteateae egtgggetae gtggaegae egetgteegt gaggttegae agegaegeea 120 cgagteegag gaaggageeg egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegagagage etgeggaaee tgeggegeta etaeaaceag agegaggeeg ggteteaeae eetecagagg atgtaegget 300 gegaegtggg geeggaeggg egeeteetee gegggeataa eeagtaegee taegaeggea 360 aggattaeat egeeetgaae gaggaeetge geteetggae egeegeggae aeggeggee 420 agateaecea gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetaeetgg 480 agggegagtg egtggagtgg eteegeagat acetggagaa egggaaggag aegetgeage 540 546
<210> 808 <211> 619 <212> DNA <213> Homo sapiens
<400> 808 atgcgggtca cggcgcccg aaccgtcctc ctgctgctct cgggagccct ggccctgacc gagacctggg ccggctcca ctccatgagg tatttctaca ccgccatgtc ccggcccggc
<210> 809 <211> 619 <212> DNA <213> Homo sapiens
atgeggtea eggegeeeg aaceeteete etgetgetet ggggggeagt ggeeetgaee 60 gagacetggg etggeteeca etecatgagg tattteeaca eeteegtgte eeggeeegge 120 egeggggage eeegetteat eacegtggge taegtggaeg acaegetgtt egtgaggtte 180 gacagegaeg ecaegagtee gaggaaggag eegeggeee eatggataga geaggagggg 240 eeggagtatt gggacegga gacacagate tteaagaeea acaeacagae ttaeegaag 300 aacetgegga tegegeteeg etaetacaae eagagegagg eegggtetea eaceeteeag 360 ageatgtaeg getgegaegt ggggeeggae gggegeetee teegegggea taaceagtae 420 geetaegaeg geaaggatta eategeeetg aaegaggaee tegeteete gaeegeege 480 gacaeggegg eteagateae eeagegeaag tgggaggegg eeegtgtegg ggageagetg 540 agageetaee tggagggega gtgegtggag tggeteegea gataeetgga gaaegggaag 600 gagaaegetge ageegegg

540 546

•		
<210>	810	
<211>	546	
<212>	DNA	
<213>	Homo sapiens	
<400>	810	
	tc catgaggtat ttccacaccg ccatgtcccg gcccggccgc ggggagcccc	60
gcttcatc	ac cgtgggctac gtggacgaca cgctgttcgt gaggttcgac agcgacgcca	120
cgagtcc	gag gaaggagccg cgggcgccat ggatagagca ggaggggccg gàgtattggg	180
	gac acagatetec aagaceaaca cacagaetta eegagagage etgeggaace	240
	cta ctacaaccag agcgaggeeg ggteteacae cetecagagg atgtaegget	300 360
	ggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca	420
	cat cgccctgaac gaggacctgc gctcctggac cgcggcggac accgcggctc cca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg	480
	eta gegenagiga gaggeggee bibliggegga gengelgaga gerindeliga	540
gcgctg		546
<210>	811	
<211>	546	
<212>	DNA	
<213>	Homo sapiens	
<400>	811	
	etc catgaggtat ttccacaccg ccatgtcccg gcccggccgc ggggagcccc	60
	ac cgtgggctac gtggacgaca cgctgttcgt gaggttcgac agcgacgcca	120
	gag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg	180
	agac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace	240
	cta ctacaaccag agcgaggeeg ggteteacae cetecagagg atgtaegget	300 360
	ggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca .cat cgccctgaac gaggacctgc gctcctggac cgcggcggac acggcggctc	420
agatcac	cca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg	480
agggcga	agtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc	<b>54</b> 0
gcgctg		546
<210>	812	
<211>	546	
<212>	DNA	
<213>	Homo sapiens	
<400>	812	
	ctc catgaggtat ttccacaccg ccatgtcccg gcccggccgc ggggagcccc	60
	cac cgtgggctac gtggacgaca cgctgttcgt gaggttcgac agcgacgcca	$\frac{120}{180}$
	gag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg	$\frac{180}{240}$
	agac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace eta etacaaceag agegaggeeg ggteteacae eetecagage atgtaegget	300
acaacat	eggg geeggaeggg egeeteetee gegggeataa eeagtaegee taegaeggea	360
aggatta	acat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc	420
	erca granaataa gaggacaga gtgaggcgga gcagcggaga gcctacctgg	480

agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacctgg

agggcgagtg cgtggattgg ctccgcagat acctggagaa cgggaaggac aagctggagc

<210> 813 <211> 619 <212> DNA

gcgctg

<213> Homo sapiens

gagacet cgcgggg gacageg ccggagt agcetge agcatgt gcctacgg gacaegg agageet	tea eggeaceeg aacegteete etgetgetet eggegeeet ggeeetgace ggg eeggeteea etceatgagg tattteeaca eegceatgte eeggeeegge agge eeggeteeta eacegtggge taegtggaeg acacgetgtt egtgaggtte acg eegegeegg gaggaaggag eegegggege eatggataga geaggaggggatt gggaaceggga gacacagate tecaagacea acacacagae ttaeegagag gga acetgegegg etactacaac eagagegagg eegggtetea eaceeteeag acg getgegaegt ggggeeggae gggegeetee teegeggea taaceagtae acg geaaggatta eategeeetg aacgaggaee tgegeteetg gacegeegg eegg etcagatea eacegeegg etcagateac eeggeaegg eeggteetee gacegeegg eegg etcagateac eeggeeaag tgggaggegg eegtgagge ggageagegg eegg e	60 120 180 240 300 360 420 480 540 600 619
<210><211>	814 546	
<211><212>	DNA	
<213>	Homo sapiens	
<100>	014	
getteate egagtee aceggga tgegegg gegaegt aggatta agateac	etc catgaggtat ttccacacet cegtgteceg geceggeege ggggageece cae egtgggetae gtggaegaca egetgttegt gaggttegae agegaegeea gag gaaggageeg egggegeeat ggatagagea ggaggggeeg gagtattggg egae acagatetee aagaceaaca cacagaetta eegagaggee etgeggaace eta etacaaceag agegaggeeg ggteteacac eetecagage atgtaegget ggg geeggaegge egeeteetee gegggeatga eeagtaegee taegaeggea eat egeeetgaae gaggaeetge geteetggae egeegegae aeggeggete eea gegeaagtgg gaggeggeee gtgtggegga geagetgaa geetaeetgg agtg egtggagtgg eteeteggae gegetgaag geagetgaa geetaeetgg agtg egtggagtgg eteeggaa egggaaggag aegetgaga egggagggeee gtgtggegga egggaaggag aegetgeage agtg egtggagtgg eteeggaaa egggaaggag aegetgeage	60 120 180 240 300 360 420 480 540 546
<210>	815	
<211> <212>	546 DNA	•
<213>	Homo sapiens	•
<400>	815	
geteceae getteate egagtee aceggga egeteege gegacgt aggatta agateae	cte catgaggtat ttecacacet cegtgteeeg geceggeege ggggageece cac cegtgggetae gtggaegaca egetgttegt gaggttegae agegaegeea gag gaaggageeg egggegeeat ggatagagea ggaggggeeg gagtattgggagae acagatetee aagaeeaaca cacagaetta eegaggaac etgeggateg eta etacaaceag agegaggeeg ggteteacac eetecagage atgtaegget eggg geeggaegg egeeteetee gegggeataa eeagtaegee taegaeggea eat egeetgaae gaggaeetge geteetggae egeegeggae aeggegete eeca gegeaagtgg gaggeegeee gtgtggegga geagetgaa geetaeetggaagtg egtggagtgg eteegaagtgg gaggeggeee gtgtggegga geagetgaga geetaeetggaagtg egtggagtgg eteegaagtaa eegggaaggag aegetgeage	60 120 180 240 300 360 420 480 540 546
<210>	816	
<211>	619	
<212> <213>	DNA Homo sapiens	
<400>	816 gtea eggegeeeg aacceteete etgetgetet ggggggeagt ggeeetgace	60
gagacci	ULLUEUUUUE IIIIUUUVVVVV VYRVYRVVV RARRASUUSU SEVVVYBUUU	

ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag	300
agectgegga acctgegegg etactacaac cagagegagg eegggtetea caccetecag	360
aggatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca tgaccagtcc	420
gectacgaeg geaaggatta categeeetg aacgaggaee tgegeteetg gaeegeegeg	480
gacacggegg ctcagatcac ccagegcaag tgggaggegg cccgtgtggc ggagcagetg	<b>54</b> 0
agagectace tggagggega gtgcgtggag tggeteegea gatacetgga gaacgggaag	600
gagacgetge agegegegg	619

<210> 817

<211> 546

<212> DNA

Homo sapiens <213>

<400> 817

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece 120 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetec aagaccaaca cacagaetta eegagagage etgeggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aggattacat cgccctgaac gaggacetgc gctcctggac cgccgcggac acggcggctc agatetecea gegeaagttg gaggeggeee gtgtggegga geagetgaga geetaeetgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc gcgctg

546

180

<210> 818

<211> 619

<212> DNA

<213> Homo sapiens

<400> 818

60 atgegggtea eggeaecceg aaccgtecte etgetgetet eggeggeeet ggeeetgace gagacetggg ceggetecea etceatgagg tatttecaea eegecatgte eeggeeegge 120 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc gacagegacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag aggatgtacg getgegacgt ggggeeggac gggegeetee teegegggea taaccagtac gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgccgcg gacacggcgg ctcagatctc ccagcgcaag tgggaggcgg cccgtgaggc ggagcagcgg 600 agagectace tggagggega gtgcgtggag tggctccgca gatacetgga gaacgggaag gacaagctgg agcgcgctg

240 300 360

420 480 540

619

<210> 819

<211> 546

<212> DNA

<213> Homo sapiens

<400> 819

geteceacte catgaggtat ttecacacet cegtgteeeg geeeggeege ggggageece getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetec aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct gegacetggg geeegaeggg egeeteetee gegggeatga eeagtaegee tacgaeggea aggattacat egecetgaac gaggacetge geteetggae egeegeggae aeggeggete agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg

60 120

180 240

300

360

420

agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgg gcgcgg	gaaggag acgctgcagc	540 546
<210> 820 <211> 546 <212> DNA <213> Homo sapiens		
<400> 820 geteceacte catgaggtat ttecacaceg ceatgteeeg geegggetteateae egtgggetae gtggaegaea egetgttegt gaggtegagteegag gaaggageeg egggegeeat ggatagagea ggaeeggaacae acagaettee aagaeeaaea cacagaetta eeg tgegeggeta etacaaceag agegaggeeg ggteteaeae eete gegaegtggg geeggaeggg egeeteetee gegggeataa eeag aggattacat egeeetgaae gaggaeetge geteetggae egee agateteeea gegeaagttg gaggeggeee gtgtggegga geagagteeeggagtg egtggagtgg eteegeagat acetggagaa egggegeetg	ttegae agegaegeea aggggeeg gagtattggg agagage etgeggaaee eagagg atgtaegget gtaegee taegaeggea geggae aeggeggete getgaga geetaeetgg	60 120 180 240 300 360 420 480 540 546
<210> 821 <211> 546 <212> DNA <213> Homo sapiens		
<400> 821 geteceaete eatgaggtat ttecaeaeet eegtgteeeg geeegg getteateae egtgggetae gtggaegaea egetgttegt gagg egagteegag gaaggageeg egggegeeat ggatagagea gg acegggagae acagatetee aagaceaaea eacagaetta eeg tgegeggeta etaeaaeeag agegaggeeg ggteteaeae eete gegaegtggg geeggaeggg egeeteetee gegggeataa eeag aagattaeat egeeetgaae gaggaeetga geteetggae ege agateaeea gegeaagtgg gaggeggeee gtgaggegga ge agggeetgtg egtggagtgg eteegeagat acetggagaa egg gegegg	ttegae agegaegeea aggggeeg gagtattggg aggage etgeggaaee eagagg atgtaegget gtaegee taegaeggea ageggae aeggeggete agetgaga geetaeetgg	60 120 180 240 300 360 420 480 540 546
<210> 822 <211> 546 <212> DNA <213> Homo sapiens		
<400> 822 geteceaete catgaggtat ttecaeaeet cegtgteeeg gecegggetteateae egtgggetae gtggaegaea egetgteegt gaggegateegag gaaggageeg egggegeeat ggatagagea ggaeegggagae acagatetee aagaceaaea cacagaetta eeg tgegeggeta etaeaaeeag agegaggeeg ggteteaeae eete gegaegtggg geeggaeggg egeeteetee gegggeataa eea aggattaeat egeeetgaae gaggaeetge geteetggae egeagateaeeea gegeaagtgg gaggegeee gtgtggegga geaaggeegagtg egtggagtgg eteegeagat acetggagaa egggeggg	ttcgac agcgacgcca gagggccg gagtattggg gagagagc etgcggaacc ccagagc atgtacggct gaacgcc tacgacggca geggac acggcggctc agctgaga gcctacctgg	60 120 180 240 300 360 420 480 540 546

<210> 823 <211> 546 <212> DNA

<213> Homo sapiens

<400> 823

60 geteceacte catgaggtat ttecacacet cegtgteeeg geeeggeege ggggageeee 120 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct 360 gcgacetggg gccggacggg cgcctcetce gcgggcataa ccagtacgcc tacgacggca 420 aagattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 824

<211> 546

<212> DNA

<213> Homo sapiens

<400> 824

geteceacte catgaggtat ttecacacet cegtgteeeg geeeggeege ggggageece getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg acceggagae acagatetee aagaceaaea cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

60

180

240

480 540

546

480 540

546

<210> 825

<211> 546

<212> **DNA** 

<213> Homo sapiens

<400> 825

geteceacte catgaggtat ttecacaceg ceatgteeeg geeeggeege ggggageeee getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetec aagaceaaca cacagaetta ccgagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccaggtg atgtatggct gegaegtggg geeggaeggg egeeteetee gegggeataa eeagtaegee taegaeggea aggattacat cgccetgaac gaggacetge geteetggac egeegeggac aeggeggete agatetecea gegeaagttg gaggeggeee gtgtggegga geagetgaga geetaeetgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc gcgctg

60

546

<210> 826

<211> 546

<212> **DNA** 

<213> Homo sapiens

<400> 826

geteceacte catgaggtat ttecacaceg ceatgteecg geeeggeege ggggageece getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea

cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatctcc aagaccaaca cacagactta ccgagagagc ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc agatctccca gcgcaagttg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc gcgctg	180 240 300 360 420 480 540 546
<210> 827	
<211> 546	
<212> DNA	
<213> Homo sapiens	
<400> 827	
geteceaete eatgaggtat ttecaeaeeg ceatgteeeg geeeggeege ggggageeee getteateae egtgggetae gtggaegaea egetgteegt gaggttegae agegaegeea egagteegag gaaggageeg egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegagagage etgeggaaee tgegeggeta etaeaaeeag agegaggeeg ggteteaeae eeteeagage atgtaegget gegaegtggg geeggaegge egeeteetee gegggeatga eeagtaegee taegaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeegggae aeggeggee agateaeeea gagateaeeea gegeaagtgg gaggeggeee gtgaggegga geageggaa geetaeetgg agggegagtg egtggagtgg eteegeagat acetggagaa egggaaggae aagetggage gegetg	60 120 180 240 300 360 420 480 540 546
(010) 000	
<210> 828 <211> 546	
<212> DNA	
<213> Homo sapiens	
<400> 828	•
geteceaete catgaggtat ttecaeaecg ceatgteceg geceggeege ggggagecee getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea egagteegag gaaggageeg egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegaggagee etgeggaaece tgegeggeta etaeaaecag agegaggeeg ggteteaeae eeteeagagg atgtaegget gegaegtggg geeggaegge egeeteetee gegggeatga eegetgaegea aggattaeat egeeetgaae gaggaeetge geteetggae egeegegee agateteeea gegeaagttg gaggeggeee gtgtggegga geagetgaga geetaeetgg aggeegagte egtggagtgg eteegagat acetggagaa eegggaaggeeggeeggeeggeeeggeeggaggaggagga	60 120 180 240 300 360 420 480 540 546
<210> 829	
<211> 525 <211> 546	
<212> DNA	
<213> Homo sapiens	
<400> 829 geteceaete catgaggtat ttecaeaeeg ceatgteeeg geeeggeege ggggageeee getteateae egtgggetae gtggacgaea egetgttegt gaggttegae agegaegeea egagteegag gaaggageeg egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaea eacagaetta eegagagae etgeggaaee tgegeggeta etaeaaeeag agegaggeeg ggteteaeat eateeaggtg atgtatgget gegaegtggg geeggaeggg egeeteetee gegggeataa eeagtaegee taegaeggea agaattaeat egeeetgaae gaggaeetge geteetggae egeegeggete	60 120 180 240 300 360 420
agatetecca gegeaagttg gaggeggeee gtgtggegga geagetgaga geetacetgg	480

540 agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc 546 gcgctg <210> 830 <211> 546 <212> DNA <213> Homo sapiens 60 <400> 830gctcccactc catgaggtat ttccacacct ccgtgtcccg gcccggccgc ggggagcccc getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea 180 cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg 240 accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace 300 tgegeggeta etacaaccag agegaggeeg ggteteacae eetecagage atgtaegget 360 gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca 420 aggattacat cgccctgaac gaggacctga gctcctggac cgccgcggac acggcggctc 480 agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg 540 agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcgcgg <210> 831 <211> 546 <212> DNA <213> Homo sapiens <400> 831 geteceacte catgaggtat ttecacaceg ceatgteeeg geeeggeege ggggageeee 60 120 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea 180 cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg **24**0 accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace 300 tgegeggeta etacaaceag agegaggeeg ggteteacae cetecagagg atgtaegget 360 gegacgtggg geeggaeggg egeeteetee gegggeataa eeagttegee taegaeggea 420 aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc 480 agatetecca gegeaagttg gaggeggee gtgtggegga geagetgaga geetacetgg 540 agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc 546 gcgctg 832 <210> <211> 546 <212> DNA <213> Homo sapiens <400> 832 60 geteceacte catgaggtat ttecacacet cegtgteeeg geeeggeege ggggageeee getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea 120 cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg 180 accgggagac acagatetee aagaceaaca cacagaetta eegagagaac etgeggaace 240 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct 300 gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca 360 420 aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg 480 agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 546 gcgcgg

<210> 833

<211> 546

<212> DNA

#### <213> Homo sapiens

<400> 833

60 geteceacte catgaggtat ttecacaceg ceatgteeg geeeggeege ggggageece getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea 120 180 cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg 240 accgggagac acagatetec aagaceaaca cacagaetta ccgagagage etgeggaace tgegeggeta etacaaceag agegaggeeg ggteteacae cetecagagg atgtaegget 300 360 gegacgtggg geeggacggg egeeteetee gegggeataa eeagteegee tacgacggea 420 aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc 480 agatetecca gegeaagttg gaggeggeee gtgtggegga geagetgaga geetaeetgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc 540 546 gcgctg

<210> 834 <211> 912

<212> DNA

<213> Homo sapiens

#### <400> 834

gggggcagtg gccctgaccg agacctgggc tggctcccac tccatgaggt atttccacac 60 120 cteegtgtee eggeeeggee geggggagee eegetteate accgtggget acgtggaega 180 cacgetgtte gtgaggtteg acagegaege cacgagteeg aggaaggage egegggegee atggatagag caggagggc cggagtattg ggaccgggag acacagatct ccaagaccaa cacacagaet taccgagaga gcctgcggaa cctgcgcggc tactacaacc agagcgaggc 300 cgggtctcac accetecaga geatgtacgg etgegacgtg gggccggacg ggcgceteet 360 420 ccgcgggcat aaccagtacg cctacgacgg caaggattac atcgccctga acgaggacct 480 gegeteetgg acegeggg acaeggegge teagateace cagegcaagt gggaggegge 540 ccgtgtggcg gagcagctga gagcctacct ggagggcacg tgcgtggagt ggctccgcag atacctggag aacgggaagg agacgctgca gcgcgcggac cccccaaaga cacacgtgac 600 660 ccaccaccc atctctgacc atgaggccac cctgaggtgc tgggccctgg gcttctaccc 720 tgcggagate acactgacet ggcagcggga tggcgaggae caaactcagg acactgaget 780 tgtggagacc agaccagcag gagatagaac ettecagaag tgggeagetg tggtggtgce 840 ttetggagaa gagcagagat acacatgeca tgtacagcat gaggggetge egaageeeet 900 caccetgaga tgggageegt etteceagte cacegteece ategtgggea ttgttgetgg cctggctgtc ct

240

912

180

540

546

<210> 835

<211> 546

<212> DNA

<213> Homo sapiens

### <400> 835

60 geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageece 120 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg 240 accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct 360 gegacgtggg geeggacggg egeeteetee gegggeataa ceagtaegee tacgaeggea 420 aggattacat cgccctgaac gaggacetgc gctcctggac cgccgcggac acggcggctc 480 agateaceca gegeaagtgg gaggeggeec gtgtggegga geagetgaga geetaeetgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

836 <210>

<211> 546

<212> DNA

#### <213> Homo sapiens

<400> 836

60 geteceacte catgaggtat ttecacaceg ceatgteeeg geeeggeege ggggageece 120 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggagggccg gagtattggg 180 accgggagac acagatetee aagaceaaca cacagaetta cegagagage etgeggaace 240 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 300 gcgacgtggg gccggacggg cgcctcctcc gcgggtatga ccagtacgcc tacgacggca aggattacat egecetgaac gaggacetge geteetggae egeegeggae acggeggete agatetecca gegeaagttg gaggeggeee gtgtggegga geagetgaga geetacetgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc gcgctg

60

120

300 360

420 480

180

240

540 546

<210> 837 <211> 546

<212> DNA

<213> Homo sapiens

<400> 837

geteceacte catgaggtat ttecacaceg ceatgteeeg geeeggeege ggggageece getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetga eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gegacgtggg geeggacggg egeeteetee gegggeataa ceagtaegee tacgaeggea aggattacat egecetgaac gaggacetge geteetggae egeegeggae aeggeggete agatetecca gegeaagttg gaggeggeee gtgtggegga geagetgaga geetacetgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc gcgctg

<210> 838

<211> 546

<212> DNA

<213> Homo sapiens

<400> 838

60 geteceacte catgaggtat ttecacacet eegtgteeeg geeeggeege ggggageece getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaccaaca cacagaetta ccgagagage etgeggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

> 420 480 540

546

<210> 839

<211> 1017

<212> DNA

<213> Homo sapiens

<400>

atgegggtea eggeaceeg aacegteete etgetgetet eggeggeeet ggeeetgace gagacetggg ceggetecea etceatgagg tatttecaea eegecatgte eeggeeegge cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc

60 120

180

480 540

546

240 gacagegacg ccaegagtee gaggaaggag cegegggege catggataga geaggagggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 agcetgegga acetgegegg etactacaac eagagegagg eegggtetea eaettggeag 420 aggatgtatg getgegaegt ggggeeggae gggegeetee teegegggea taaccagtae 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgcggcg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcaggac agagcctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 600 660 gacacgctgg agcgcgcgga cccccaaag acacacgtga cccaccaccc catctctgac 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 900 960 tetteccagt ceacegtece categtggge attgttgetg geetggetgt eetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 840 <211> 1017 <212> DNA <213> Homo sapiens

<400> 840

atgcgggtea cggcaccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc 60 120 gagacetggg eeggeteeca etecatgagg tattteeaca eegecatgte eeggeeegge 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc 240 gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 300 agectgegga acetgegegg etactacaac cagagegagg cegggtetea caecetecag 360 420 agcatgtacg getgegacgt ggggccggac gggcgcctcc tccgcgggca taaccagtac gcctacgacg gcaaggatta categeeetg aacgaggace tgcgcteetg gaccgeggeg 480 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcaggac 540 600 agagcctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 660 gacacgctgg agegegegga ccccccaaag acacacgtga cccaccaccc catetetgac 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 960 tetteccagt ecacegtece categtggge attgttgetg geetggetgt ectageagtt gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 841 546 <211> <212> DNA <213> Homo sapiens

<400> 841

60 geteceacte catgaggtat ttecacaceg ceatgteeeg geeeggeege ggagageece getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea 120 cgagtccgag gaaggagccg cgggcgccat ggatagagca ggagggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca 360 420 aggattacat cgccctgaac gaggacctgc gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcaggacaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac acgctggagc gcgcgg

```
<211>
       546
<212>
       DNA
<213>
      Homo sapiens
<400> 842
geteceacte catgaggtat ttecacaceg ceatgteeeg geeeggeege ggggageece
                                                                   60
                                                                   120
getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea
cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg
                                                                      180
                                                                     240
accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace
tgegeggeta etacaaceag agegaggeeg ggteteacae eetecagage atgtaegget
                                                                   300
                                                                   360
gcgacctggg gcccgacggg cgcctcctcc gcgggcatga ccagtacgcc tacgacggca
                                                                   420
aggattacat cgccctgaac gaggacctgc gctcctggac cgcggcggac accgcggctc
                                                                     480
agateaccea gegeaagtgg gaggeggee gtgtggegga geaggacaga geetacetgg
                                                                     540
agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac acgctggagc
                                                                       546
gcgcgg
<210> 843
<211>
       546
<212>
       DNA
<213>
       Homo sapiens
<400> 843
geteceacte catgaggtat ttecaeaceg ceatgteeeg geeeggeege ggggageece
                                                                   60
getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea
                                                                   120
cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg
                                                                      180
accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaage
                                                                     240
tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagagg atgtatggct
                                                                    300
gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca
                                                                    360
aggattacat cgccctgaac gaggacctgc gctcctggac cgcggcggac accgcggctc
                                                                    420
                                                                     480
agatcaccca gegeaagtgg gaggeggeec gtgtggegga geaggacaga geetacetgg
                                                                      540
agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac acgctggagc
                                                                        546
gcgcgg
<210>
        844
<211>
        546
<212>
        DNA
<213>
        Homo sapiens
<400> 844
geteceacte catgaggtat ttecacaceg ceatgteeeg geeeggeege ggggageeee
                                                                   60
getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea
                                                                   120
cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg
                                                                      180
                                                                     240
accgggagac acagatetec aagaceaaca cacagaetta ccgagagage etgeggaace
                                                                    300
tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagagg atgtatggct
gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca
                                                                    360
aggattacat cgccctgaac gaggacctgc gctcctggac cgcggcggac accgcggctc
                                                                    420
                                                                      480
agatcaccca gegeaagtgg gaggeggeee gtgtggegga geaggacaga geetacetgg
                                                                      540
agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac acgctgcagc
                                                                        546
gcgcgg
```

<210> 845

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 845

gagacetggg ceggetecea etecatgagg tatttetaea eeteegtgte eeggeeegge	20
egeggggage ceegetteat eteagtggge taegtggaeg acacceagtt egtgaggtte	180
gacagegaeg cegegagtee gagagaggag cegegggege egtggataga geaggagggg	240
ccggagtatt gggaccggaa cacacagatc tacaaggccc aggcacagac tgaccgagag	300
agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag	360
agcatgtacg getgegacgt ggggccggac gggcgcctcc teegegggca taaccagtac	420
gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgcggcg	480
gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcaggac	<b>54</b> 0
agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag	600
gacacgetgg agegegegga ecceccaaag acacacgtga eccaccacce catètetgae	<b>66</b> 0
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcageggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg	900
tetteccagt ceaecgtece categtggge attgttgetg geetggetgt cetageagtt 96	0
gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga	1017

<210> 846

<211> 547

<212> DNA

<213> Homo sapiens

### <400> 846

60 ggeteceact ceatgaggta tttecaeace teegtgteee ggeeeggeeg eggggageee 120 cgcttcatct cagtgggcta cgtggacgac acccagttcg tgaggttcga cagcgacgcc gcgagtccga gagaggagcc gcgggcgccg tggatagagc aggaggggcc ggagtattgg gaceggaaca cacagateta caaggeecag geacagaetg acegagagag cetgeggaac ctgcgcggct actacaacca gagcgaggcc gggtctcaca ccctccagag catgtacggc 300 tgcgacgtgg ggccggacgg gcgcctcctc cgcgggcata accagtacgc ctacgacggc 360 420 aaggattaca tegeeetgaa egaggaeetg egeteetgga eegeggegga eacegegget 480 cagateacce agegeaagtg ggaggeggee egtgtggegg ageaggaeag ageetaeetg gagggcacgt gcgtggagtg gctccgcaga tacctggaga acgggaagga cacgctggag cgcgcgg

180

240

540

60 120

180

240

300 360

420

480

540 546

547

<210> 847

<211> 546

<212> DNA

<213> Homo sapiens

#### <400> 847

geteceacte catgaggtat ttetacacet cegtgteeeg geeeggeege ggggageeee getteatete agtgggetae gtggaegaea eecagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acagatctac aaggcccagg cacagactga ccgagagagc ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcctggac cgcggcggac accgcggctc agatcaccca gegeaagtgg gaggeggeec gtgtggegga geaggacaga geetacetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac acgctggagc gcgcgg

<210> 848

<211> 1052

<212> DNA

<213> Homo sapiens

atgcgggtca eggegeceeg aacceteete etgetgetet ggggggeagt ggeeetgace	60
	120
cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc	180
gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg	240
ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag	300
aacctgegea eegegeteeg etactacaac cagagegagg eegggtetea cateateeag	360
aggatgtacg getgegaegt ggggeeggae gggegeetee teegegggta tgaccaggae	420
gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg	<b>4</b> 80
gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcaggac	540
agagectace tggagggeet gtgegtggag tegeteegea gatacetgga gaaegggaag	600
gagacgetge agegegegga cececcaaag acacatgtga eccaccacce catetetgae	660
catgaggtca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg	900
tetteccagt ecacegtece categtggge attgttgetg geetggetgt ectageagtt 96	_
gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtggactg	1020
ctgtgatgtg taggaggaag agctcaggtg ga	1052

<210> 849 <211> 822

<212> DNA

<213> Homo sapiens

<400> 849

geteceaete catgaggtat ttetacaeeg ceatgteeeg geeeggeege ggggageeee 60 120 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggagggccg gagtattggg accgggagac acagateteg aagaceaaca cacagaetta eegagagaac etgegeaceg 300 egeteegeta etacaaceag agegaggeeg ggteteacat catecagagg atgtaegget 360 gcgacgtggg gccggacggg cgcctcctcc gcgggtatga ccaggacgcc tacgacggca 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gegeaagtgg gaggeggeec gtgtggegga geaggacaga geetacetgg agggcctgtg cgtggagtcg ctccgcagat acctggagaa cgggaaggag acgctgcagc 600 gegeggacce eccaaagaca catgtgacce accaececat etetgaccat gaggteacee 660 tgaggtgctg ggccctgggc ttctaccctg cggagatcac actgacctgg cagcgggatg gegaggacca aactcaggac accgagettg tggagaccag accagcagga gatagaacct 780 tecagaagtg ggeagetgtg gtggtgeett etggagaaga geagagatae acatgeeatg tacagcatga ggggctgccg aagcccctca ccctgagatg gg

180

240

480

540

720

822

<210> 850

<211> 546

<212> DNA

<213> Homo sapiens

<400> 850gctcccactc catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc 60 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea 120 180 cgagtccgag gaaggagccg cgggcgccat ggatagagca ggagggccg gagtattggg 240 accgggagac acagatetee aagaceaaca cacagaetta eegagagaac etgegeaccg 300  ${\tt cgctccgcta}\ {\tt ctacaaccag}\ {\tt agcgaggccg}\ {\tt ggtctcacat}\ {\tt catccagagg}\ {\tt atgtacggct}$ 360 gcgacgtggg gccggacggg cgcctcctcc gcgggtatga ccaggacgcc tacgacggca 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc 480 agatcaccca gcgcaagtgg gaggcggccc gtgtcgcgga gcaggacaga gcctacctgg 540 agggcctgtg cgtggagtcg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcgcgg

<211> 1017 <212> DNA

<213> Homo sapiens

<400> 851

60 atgegggtea eggegeeeeg aacceteete etgetgetet ggggggeagt ggeeetgace 120 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc 240 gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 aacctgcgca ccgcgctccg ctactacaac cagagcgagg ccgggtctca catcatccag 420 aggatgtacg getgegacgt ggggccggac gggcgcctcc tccgcgggta tgaccaggac 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeggeg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 600 agagectace tggaggget gtgegtggag tegeteegea gatacetgga gaacgggaag gagacgetge agegegegga cececeaaag acacatgtga eccaceacee catetetgae 660 720 catgaggtca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 960 tetteccagt ceaeegtece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 852

<211> 1017 <212> DNA

<213> Homo sapiens

<400> 852

60 atgegggtea eggegeeeg aacceteete etgetgetet ggggggeagt ggeeetgaee 120  ${\tt gagacctggg}\ {\tt ccggctccca}\ {\tt ctccatgagg}\ {\tt tatttctaca}\ {\tt ccgccatgtc}\ {\tt ccggcccggc}$ 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc 240 gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 aacctgcgca ccgcgctccg ctactacaac cagagcgagg ccgggtctca catcatccag 420 aggatgtatg getgegaegt ggggeeggae gggegeetee teegegggta tgaceaggae gectacgacg geaaggatta categeeetg aacgaggace tgageteetg gacegeggeg 480 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 600 agagectace tggagggeet gtgegtggag tegeteegea gatacetgga gaacgggaag gagacgetge agegegegga ecceecaaag acacatgtga eccaecacee catetetgae 660 720catgaggtca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 840 ggagatagaa cettecagaa gtgggeaget gtggtggtge ettetggaga agageagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 960 tetteceagt ceaeegtece categtggge attgttgetg geetggetgt eetageagtt gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 853

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 853

atgegggtea eggegeeeeg aaceeteete etgetgetet ggggggeagt ggeeetgace 60 gagacetggg eeggeteeea etecatgagg tatttetaca eegceatgte eeggeeegg 120 egeggggage eeegetteat eacegtggge taegtggaeg acaegetgtt egtgaggtte 180 gacagegaeg eeacgagtee gaggaaggag eegegggege eatggataga geaggaggg 240 eeggagtatt gggaeeggga gacaeagate tecaagaeea acaeacagae ttaeegaga 300

aacctgcgca ccgcgctccg ctactacaac cagagcgagg ccgggtctca catcatccag	360
aggatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggta tgaccaggac	420
gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeggeg	480
gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagcgg	<b>540</b>
agagectace tggagggeae gtgegtggag tegeteegea gatacetgga gaaegggaag	600
gagacgetge agegegegga ecceecaaag acacatgtga eccaecacee catetetgae	660
catgaggtca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg	900
	60
gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga	1017

<210> 854

<211> 404

<212> DNA

Homo sapiens <213>

### <400> 854

ggcgccatgg atagagcagg aggggccgga gtattgggac cgggagacac agatctccaa 120 gaccaacaca cagacttacc gagagaacct gcgcaccgcg ctccgctact acaaccagag 180 cgaggccggg teteacatea tecagaggat gtacggetge gacgtgggge cggacgggeg 240 cctcctccgc gggtatgacc agtacgccta cgacggcaag gattacatcg ccctgaacga 300 ggacctgage teetggaceg eggeggacae egeggeteag ateaeceage geaagtggga 360 ggcggcccgt gtggcggagc aggacagagc ctacctggag ggcctgtgcg tggagtcgct 404 ccgcagatac ctggagaacg ggaaggagac gctgcagcgc gcgg

60

240

300

**540** 

600

619

240

<210> 855

<211> 619

<212> **DNA** 

<213> Homo sapiens

# <400> 855

60 atgegggtea eggegeeeeg aacceteete etgetgetet ggggggeagt ggeeetgaee 120 gagacetggg eeggeteeca etceatgagg tatttetaca eegecatgte eeggeeegge 180 cgcggggagc cccgcttcat tgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag 360 aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccgggtctca catcatccag 420 aggatgtacg getgegaegt ggggeeggae gggegeetee teegegggta tgaccaggae gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcaggac agagectace tggagggeet gtgegtggag tegeteegea gatacetgga gaacgggaag gagacgctgc agcgcgcgg

<210> 856

<211> 1017

<212> DNA

<213> Homo sapiens

## <400> 856

60 atgegggtea eggegeeeg aacceteete etgetgetet ggggggeagt ggeeetgace 120  ${\tt gagacctggg} \ {\tt ccggctccca} \ {\tt ctccatgagg} \ {\tt tatttctaca} \ {\tt ccgccatgtc} \ {\tt ccggcccggc}$ 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc gacagcgacg ccgcgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag aacetgegea eegegeteeg etaetacaac eagagegagg eegggtetea eateateeag 360

aggatgtatg getgegaegt ggggeeggae gggegeetee teegegggta tgaccaggae	420
gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg	480
gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg	<b>54</b> 0
agagcetace tggagggeet gtgcgtggag tegeteegea gatacetgga gaacgggaag	600
gagacgetge agegegegga ecceecaaag acacatgtga eccaecacee catetetgae	660
catgaggtca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg	900
	60
gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga	1017

<210> 857 <211> 1017 <212> DNA

<213> Homo sapiens

<400> 857

60 atgcgggtca cggcgcccg aaccetecte etgetgetet ggggggcagt ggccetgace 120 gagacetggg ceggetecea etceatgagg tatttetaea eegecatgte eeggeeegge 180 cgeggggage ceegetteat caeegtggge taegtggaeg acaegetgtt egtgaggtte gacagegacg cegegagtee gaggatggeg ceeegggege catggataga geaggagggg 240 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 aacetgegea eegegeteeg etactacaac cagagegagg eegggtetea cateateeag 420 aggatgtacg getgegaegt ggggeeggae gggegeetee teegegggta tgaccaggae 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcaggac 600 agagcctacc tggagggcct gtgcgtggag tcgctccgca gatacctgga gaacgggaag 660 gagacgetge agegegegga ecceccaaag acacatgtga eccaccacce catetetgae 720 catgaggtca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 960 tetteccagt ceacegtece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 858 <211> 1017 <212> DNA <213> Homo sapiens

<400> 858

atgegggtea eggegeeeeg aacceteete etgetgetet ggggggeagt ggeeetgaee 60 120 gagacctggg ceggetecea etceatgagg tatttetaea eegecatgte eeggeeegge 180 cgeggggage ceegetteat cacegtggge tacgtggaeg acaegetgtt cgtgaggtte 240 gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 agectgegga acctgegegg etactacaac cagagegagg cegggtetea cateatecag 420 aggatgtacg getgegacgt ggggccggac gggcgcctcc tccgcgggta tgaccaggac 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcaggac 600 agagcetace tggagggeet gtgcgtggag tcgctccgca gatacetgga gaacgggaag gagacgetge agegegegga ecceceaaag acacatgtga eccaceacce catetetgae 660 720 catgaggtea ecetgaggtg etgggeeetg ggettetace etgeggagat cacactgace tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 960 tetteccagt ccacegtece categtggge attgttgetg geetggetgt cetageagtt

gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

1017

60 120

180

240 300

360

420

480

540

546

<210> 859

<211> 546

<212> DNA

<213> Homo sapiens

<400>

geteceacte catgaggtat ttetacaceg ceatgteecg geeeggeege ggggageece getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta cegagagaac etgegeaccg egeteegeta etacaaccag agegaggeeg ggteteacat catecagagg atgtttgget gegacetggg geeegaeggg egeeteetee gegggeataa eeagttagee tacgaeggea aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetacetgg agggcctgtg cgtggagtcg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 860

<211> 546

<212> DNA

<213> Homo sapiens

<400> 860

geteceacte catgaggtat ttetacaceg ceatgteeeg geceggeege ggggageeee 60 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta ccgagagaac etgegeacce  ${\tt cgctccgcta}\ {\tt ctacaaccag}\ {\tt agcgaggccg}\ {\tt ggtctcacat}\ {\tt catccagagg}\ {\tt atgtacggct}$ gegaegtggg geeggaeggg egeeteetee gegggtatga eeaggaegee taegaeggea  ${\tt aggattacat\ cgccctgaac\ gaggacctga\ gctcctggac\ cgcggcggac\ accgcggctc}$ agatcaccca gegeaagtgg gaggeggccc gtgtggcgga geaggacaga gectaectgg agggcctgtg cgtggagtcg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

> 480 540

> > 546

<210> 861

<211> 546

<212> DNA

<213> Homo sapiens

### <400> 861

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatetec aagaccaaca cacagaetta ccgagagaac etgegeaccg cgctccgcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtacggct gegacgtggg geeggacggg egeeteetee gegggtatga ceaggacgee tacgacggea aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcaggacaga gcctacctgg agggcctgtg cgtggagtcg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

120 180

240

300 360

420 480

540 546

862 <210>

<211> 1017

<212> DNA

# <213> Homo sapiens

<400> 862 60 atgegggtea eggegeeeg aacceteete etgetgetet gggggggagt ggeeetgaee gagacetggg eeggeteeca etecatgagg tatttetaca eegecatgte eeggeeegge 120 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc gacagegaeg ceaegagtee gaggaaggag eegegggege catggataga geaggagggg 240 300 ccggagtatt gggagcggga gacacagatc tccaagacca acacacagac ttaccgagag 360 aacetgegea eegegeteeg etactacaac eagagegagg eegggtetea eateateeag 420 aggatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggta tgaccaggac 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeggeg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 600 agagectace tggagggeet gtgcgtggag tegeteegea gatacetgga gaaegggaag 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecace catetetgae 720 catgaggtca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 960 tetteccagt ccacegtece categtggge attgttgetg geetggetgt eetageagtt gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 863 <211> 546

<212> DNA

<213> Homo sapiens

### <400> 863

geteccaete catgaggtat tetacaecg ceatgteecg geeeggeege ggggageece getteateae egtgggetae gtggaegaea egetgteegt gaggttegae agegaegeea egagteegag gaaggageeg egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegaggagae etgegeaeg egeteegeta etacaaecag agegaggeeg ggteteaeat eateeagagg atgtaeeget gegaegtggg geeggaegge egeeteetee gegggeataa eeaggaegee tacgaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egegeggee aatgtaeeea gegeaagtgg gaggeegee gtgtggeega geaggaeaga geetaeetgg agggeetgtg egtggagteg eteeggaat acetggagaa egggaaggag aegetgeage gegegg

<210> 864

<211> 546

<212> DNA

<213> Homo sapiens

# <400> 864

geteceaete eatgaggtat teceaeaeg ceatgteeeg geceggeege ggggageeee geteateae egtggetae gtggaegaea egetgtegt gaggteegae agegaegeea egagteegag gaaggageeg egggegeeat ggatagagea ggagggeeg gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegagaggee etgegeaeeg egeteegeta etacaaeeag agegaggeeg ggteteaeae ttggeagagg atgtatgget gegaeetggg gecegaeggg egeeteetee gegggtataa eeagttagee tacgaeggea aggataeat egeeetgaae gaggaeetga geteetggae egegeggae acegeggete agateaeeea gegeaagtgg gaggegeee gtgtggegga geaggaeaga geetaeetgg agggeetgtg egtggagteg eteegeagat acetggagaa egggaaggag aegetgeage gegegg

480 540 546

180

 $\frac{240}{300}$ 

360 420

60

120

300

360

**540** 

546

420 480

60

120

180 240

<210> 865

<211> 546

```
<212>
      DNA
```

<213> Homo sapiens

### <400> 865

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee 120 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagactta cegagagaac etgegeaceg cgctccgcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggtatga ccaggacgcc tacgacggca aggattacat egecetgaac gaggacetga geteetggae egeggeggae accgeggete agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcaggacaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

180

240

300

<210> 866

<211> 546

<212> DNA

<213> Homo sapiens

#### <400> 866

geteceacte catgaggtat ttetaeaceg ceatgteeeg geeeggeege ggggageece getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagaac etgegeaceg egeteegeta etacaaccag agegaggeeg ggteteacat catecagagg atgtaegget gegaegtggg geeggaeggg egeeteetee gegggeatga eeagteegee tacgaeggea aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcaggacaga gcctacctgg agggeetgtg egtggagteg eteegeagat acetggagaa egggaaggag aegetgeage gcgcgg

60 120 180

240 300

546

<210> 867

<211> 619

<212> DNA

<213> Homo sapiens

#### <400> 867

atgegggtea eggeaceceg aacegteete etgetgetet eggeggeeet ggeeetgace gagacctggg ccgctccca ctccatgagg tatttccaca ccgccatgtc ccgcccggc egeggggage eeegetteat cacegtggge taegtggaeg acaegetgtt egtgaggtte gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccgggtctca cacttggcag aggatgtatg getgegacet ggggeeegae gggegeetee teegegggta taaccagtta gcctacgacg gcaaggatta catcgccctg aacgaggacc tgageteetg gaccgcggcg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcaggac agagectace tggagggeet gtgegtggag tegeteegea gatacetgga gaacgggaag gagacgctgc agcgcgcgg

60 120 180

240 300

> 600 619

<210> 868

<211> 546

<212> **DNA** 

<213> Homo sapiens

<400> 868

gcttcatcac cgtgggctac gtggacgaca cgctgttcgt gaggttcgac agcgacgcca	120
cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg	180
accgggagac acagatetee aagaceaaca cacagaetta eegagagaac etgegeaceg	<b>24</b> 0
cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct	300
gcgacgtggg gccggacggg cgcctcctcc gcgggtatga ccaggacgcc tacgacggca	<b>36</b> 0
aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc	<b>42</b> 0
agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcaggacaga gcctacctgg	480
agggeetgtg egtggagteg etcegcagat acetggagaa egggaaggag aegetgeage	<b>54</b> 0
gcgcgg	546

<210> 869

<211> 546

<212> DNA

<213> Homo sapiens

<400> 869

geteceaete catgaggtat tetacaecg ceatgteecg geeeggeege ggggageece geteateae egtggetae gtggaegaea egetgteegt gaggteega agegaegeea egagteegag gaaggageeg egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegagagaae etgegeaeeg egeteegeta etacaaeeag agegaggeeg ggteteaeat eateeagagg atgtaegget gegaegtggg geeggaegge egeeteetee gegggtatga eeaggaegee taegaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egegeggae acegeggete agateaeeea gegeaagtgg gaggeggeee gtgtggegga geaggaeaga geetaeetgg agggegagtg egtggagtee eteegeagat acetggagaa egggaaggag aegetgeage geegeg

 $60 \\ 120$ 

 $\begin{array}{c} 180 \\ 240 \end{array}$ 

300 360

420 480

540 546

<210> 870

<211> 546

<212> DNA

<213> Homo sapiens

<400> 870

geteceaete eatgaggtat ttetacaeeg eegtgteeeg geeeggeege ggggageeee getteateae egtgggetae gtggacgaea egetgteegt gaggteegae agegaeeea egagteegag gaaggageee ggggegeeat ggatagagea ggagggeeg gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegagagaae etgegeaeeg egeteegeta etacaaeeag agegaggeeg ggteteaeat eatecagagg atgtaeeget gegaeegtggg geeggaeeggeeggtatga eeaggaeege aeggeegea aeggaeetee agateaeea gegeaagtgg gaggeegeee gtgtggegga geaggaeaga geetaeetgg agggeetgtg egtggagteg eteegeagat acetggagaa egggaaggag aegetgeage geeggg

60 120

 $\begin{array}{c} 180 \\ 240 \end{array}$ 

300

360

420 480

60

120

180

240

300 360

420

**54**0

546

<210> 871

<211> 546

<212> DNA

<213> Homo sapiens

## <400> 871

geteceaete eatgaggtat tetacaecg ceatgteecg geeeggeege ggggageece getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea egagteegag gaaggageeg egggeeget gggtggagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegaggagae etgeeaeeg egeteegeta etacaaeeag agegaggeeg ggteteaeat cateeagagg atgtaegget gegaegtggg geeggaeggg egeeteetee gegggtatga eeaggaegee tacgaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egeggeggae acegeggete agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcaggacaga gcctacctgg 480 540 agggcctgtg cgtggagtcg ctccgcagat acctggagaa cgggaaggag acgctgcagc 546 gcgcgg

<210> 872

<211> 546

DNA <212>

<213> Homo sapiens

#### <400> 872

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagaac etgeggateg cgetcegeta etacaaceag agegaggeeg ggtetcaeat catecagagg atgtaegget gegacgtggg geeggacggg egeeteetee gegggtatga eeagtaegee tacgaeggea aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agateaceca gegeaagtgg gaggeggeee gtgtggegga geaggacaga geetaeetgg agggcctgtg cgtggagtcg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 873

<211> 546

<212> DNA

<213> Homo sapiens

### <400> 873

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece 120 getteateae egtgggetae gtggaegaea egetgttggt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetec aagaccaaca cacagaetta ccgagagaac etgegeaccg 240 300 cgetcegeta etacaaceag agegaggeeg ggtetcacat catecagagg atgtaegget 360 gcgacgtggg gccggacggg cgcctcctcc gcgggtatga ccaggacgcc tacgacggca 420 aggattacat cgccctgaac gaggacctga geteetggac cgcggcggac accgcggctc 480 agatcaccca gegcaagtgg gaggeggeee gtgtggegga geagetgaga geetacetgg 540 agggeetgtg egtggagteg etcegeagat acetggagaa egggaaggag aegetgeage gcgcgg

<210> 874

<211> 822

<212> DNA

<213> Homo sapiens

#### <400> 874

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagaac etgegeaccg cgctccgcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtacggct gegaegtggg geeggaeggg egeeteetee gegggtatga ceaggaegee taegaeggea aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcaggacaga gcctacctgg agggcctgtg cgtggagtcg ctccgcagat acctggagaa cgggaaggag acgctgcagc gegeggacce cecaaagaca catgtgacce accaecceat etetgaccat gaggecacce tgaggtgctg ggccctgggc ttctaccctg cggagatcac actgacctgg cagcgggatg gegaggacca aactcaggac accgagettg tggagaccag accagcagga gatagaacct tccagaagtg ggcagctgtg gtggtgcctt ctggagaaga gcagagatac acatgccatg

60 120 180

60

120

300

360

420480

540

546

180

546

180

240

240

300 360

420 480

540 600

660 720

780

tacagcatga ggggctgccg aagcccctca ccctgagatg gg

822

60

120

300

360

420

480

540

546

180

240

<210> 875

<211> 546

<212> DNA

<213> Homo sapiens

<400> 875

geteceaete eatgaggtat tectacaeg ceatgteeeg geeeggeege ggggageece getteateae egtgggetae gtggaegaea egetgteegt gaggteega agegaegeea egagteega gaaggageeg egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegagagaae etgegeaeeg egeteegeta etacaaeeag agegaggeeg ggteteaeat eatecagagg atgtatgget gegaeegtggg geeggaeegg egeeteetee gegggtatga eeaggaegee taegaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egegeggae acegeggete agateaeea gegeaagtgg gaggeggee gtgtggegga geageggaga geetaeetgg agggeetgtg egtggagteg eteegeagat acetggagaa egggaaggag aegetgeage geeggg

<210> 876

<211> 546

<212> DNA

<213> Homo sapiens

<400> 876

geteceaete catgaggtat tetacaecg ceatgteeg geeeggeege ggggageece
getteateae egtggetae gtggacgaea egetgteegt gaggteega agegaegeea
egagteegag gaaggageeg egggeeeat ggatagagea ggagggeeg gagtattggg
acegggagae acagatetee aagaecaaea cacagaetta eegagagae etgegeaeeg
egeteegeta etacaaeeag agegaggeeg ggteteaeat eateeagagga atgtaeeget
gegaegtggg geeggaeggeeggeeteetee gegggtatga eegggeggae
aggattaeat egeeetgaae gaggaeetga geteetggae egeggeggae aeegeggete
agateaeeea gegeaagtgg gaggeggeee gtgtggega geagetgaga acetaeetgg
agggeetgt

180

540 546

<210> 877

<211> 546

<212> DNA

<213> Homo sapiens

<400> 877

geteceaete eatgaggtat teetacaeeg eeatgteeeg geeeggeege ggggageeee getteateae egtgggetae gtggaegaea egetgteegt gaggteegae agegaegeea egagteegag gaaggageeg egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegagagaae etgegeaeeg egeteegeta etacaaeeag agegaggeeg ggteteaeat eatecagagg atgtaegget gegacgtggg geeggaegge egeeteetee gegggtatga eeaggaegee tacgaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egeggeete agateaeea gegeaagtgg gaggeggee gtgtggegga geagetgaga geetaeetgg agggeetgte egeggagteg eteegeagat acetggagaa egggaaggag aegetgeage geeggg

60

540 546

<210> 878

<211> 895

<212> DNA

180

360

420

480 540

660

720

240

300

600

780

840

895

120

#### <213> Homo sapiens

<400> 878

atgcgggtca cggcgccccg aaccctcctc ctgctgctct ggggggcagt ggccctgacc gagacetggg eeggeteeca etceatgagg tatttetaca eegecatgte eeggeeegge cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg ceggagtatt gggaceggga gacacagate tecaagacea acacacagae ttacegagag aacctgcgca ccgcgctccg ctactacaac cagagcgagg ccgggtctca caccctccag aggatgtacg getgegacgt ggggccggac gggcgcctcc tccgcgggca taaccagtac gectaegaeg geaaggatta categeeetg aacgaggaee tgegeteetg gaeegeegeg gacacggcgg ctcagatete ccagcgcaag ttggaggcgg cccgtgtggc ggagcagetg agagcetace tggagggega gtgcgtggag tegeteegea gatacetgga gaacgggaag gacaagetgg agegegetga ecceccaaag acacaegtga eccaccaece catetetgae catgaggcca ccctgaggtg ctgggccctg ggtttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atggg

<210> 879

<211> 546

<212> DNA

<213> Homo sapiens

<400>

60 geteceacte catgaggtat ttetacaceg cèatgteceg geeeggeege ggggageeee getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggagggccg gagtattggg acceggagac acagatetee aagaceaaca cacagaetta eegagagaac etgegeaceg cgetccgeta etacaaccag agegaggeeg ggtetcacat catecagagg atgtacgget gcgacgtggg gccggacggg cgcctcctcc gcgggtatga ccaggacgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agateaceca gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetacetgg agggeetgtg egtggagteg etcegeagat acetggagaa egggaaggag aegetgeage gcgcgg

180

240

300

60

120

180

240 300

360

420 480

> 540 546

120

<210> 880

<211> 546

<212> DNA

<213> Homo sapiens

<400> 880

geteceacte catgaggtat ttetacaceg ceatgteecg geeeggeege ggggageece getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagaac etgegeaccg cgctccgcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggtatga ccaggacgcc tacgacggca aggattacat caccetgaac gaggacetga geteetggac egeggeggac accegeggete agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcaggacaga gcctacctgg agggcctgtg cgtggagtcg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 881

<211> 1017

<212> DNA

<213> Homo sapiens

546

180

240

480 540

546

300

360 420

<400> 881	
atgcgggtca cggcaccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc	60
	120
cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc	180
gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg	240
ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag	300
agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca cacttggcag	360
aggatgtatg getgegacet ggggecegae gggegeetee teegegggta taaccagtta	420
gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg	480
gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcaggac	540
	600
agagectace tggagggeet gtgcgtggag tegeteegea gatacetgga gaacgggaag	660
gagacgetge agegegegga cececcaaag acacatgtga cecaccace catetetgae	720
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca	900
tetteceagt ceaceatece eategtggge attgttgetg geetggetgt cetageagtt 96	-
gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga	1017

<210> 882 546 <211> <212> DNA Homo sapiens <213>

<400> 882

geteceacte catgaggtat ttecaeaceg ceatgteeeg geeeggeege ggggageeee 60 120 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggagggccg gagtattggg 240 accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagagg atgtatggct 360 gcgacctggg gcccgacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca 420 aggattacat egecetgaac gaggacetga geteetggac egeggeggac acegeggete 480 agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcaggacaga gcctacctgg 540 agggcctgtg cgtggagtcg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 883 <211> 546 DNA <212> <213> Homo sapiens

<400> 883

60 geteceacte catgaggtat ttecacaceg ceatgteeg geeeggeege ggggageece 120 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagagg atgtatggct gcgacctggg gcccgacggg cgcctcctcc gcgggtataa ccggttagcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcaggacaga gcctacctgg agggcctgtg cgtggagtcg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 884 <211> 1017 <212> DNA

# <213> Homo sapiens

<400> 884 60 atgegggtea eggeaceeg aacegteete etgetgetet eggeggeeet ggeeetgaee 120 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc 240 gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 agectgegga acctgegegg ctactacaac cagagegagg cegggtetea cacttggeag 420 aggatgtatg getgegacet ggggeeegae gggegeetee teegegggta taaceagtta 480 gcctacgacg gcaaggatta categeettg aacgaggace tgageteetg gaeegeggeg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcaggac 540 600 agagcetace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga ecceccaaag acacatgtga eccaccacce catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteceagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 885 <211> 543 <212> **DNA** <213> Homo sapiens

<400> 885

geteceacte catgaggtat ttecaeaceg ceatgteeeg geeeggeege ggggageece 60 120 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggagggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagagg atgtatggct gcgacctggg gcccgacggg cgcctcctcc gcgggtataa ccagttagcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gegeaagtgg gaggeggeee gtgtggegga geaggacaga gtetacetgg agggcetgtg egtggagteg etcegeagat acetggagaa egggaaggag aegetgeage gcg

180

240 300

480

540

543

360 420

60 120

180

240

300

360

420

480 **540** 

546

886 <210> <211> 546 <212> DNA <213> Homo sapiens

<400> 886

geteceacte catgaggtat ttecaeaceg ceatgteeeg geeeggeege ggggageeee getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetae aaggeecagg cacagaetga eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagagg atgtatggct gcgacctggg gcccgacggg cgcctcctcc gcgggtataa ccagttagcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcaggacaga gcctacctgg agggeetgtg egtggagteg etcegeagat acetggagaa egggaaggag acgetgeage gcgcgg

887 <210> <211> 1017

540

780 840

60

120

300

360

420

480

540

546

240

300

540

600

780

180

240

DNA <212>

<213> Homo sapiens

<400> 887

60 atgegggtea eggegeeceg aaccgteete etgetgetet egggageeet ggeeetgace 120 gagacetggg eeggeteeca etecatgagg tatttetaca eegceatgte eeggeeegge 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagcgacg ccgcgagtcc gaggatggcg ccccgggcgc catggataga gcaggagggg ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 360 agectgegga acctgegegg etactacaac cagagegagg eegggtetea caceeteeag 420 aggatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca tgaccagtcc gcctacgacg gcaaggatta categecetg aacgaggace tgageteetg gaccgeggeg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg 600 agagcetace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacee catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacatgce atgtacagca tgaggggetg ccgaagceec teaccetgag atgggagcea 900 960 tetteccagt ceaceatece eategtggge attgttgetg geetggetgt ectageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

888 <210>

546 <211>

<212> **DNA** 

<213> Homo sapiens

<400> 888

geteceacte catgaggtat ttetacaceg ceatgteecg geeeggeege ggggageece getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacagactgg ccgagtgagc ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 889

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 889

60 atgegggtea eggegeeeeg aacceteete etgetgetet ggggggeagt ggeeetgace 120 gagacetggg etggetecea etceatgagg tatttetaca eegecatgte eeggeeegge 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc gacagegaeg ceaegagtee gaggaaggag eegegggege catggataga geaggagggg ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 gacctgegga ecetgeteeg etactacaac cagagegagg eegggtetea cacceteeag 420 aggatgtttg getgegaegt ggggeeggae gggegeetee teegegggta eeaceaggae 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gaccgccgcg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg agagcetace tggagggega gtgcgtggag tggeteegea gatacetgga gaacgggaag 660 gagacgctgc agegegegga cececcaaag acacaegtga eccaecaece catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca

60

120

360

420

480 540

546

180

240

360

180 240

840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg tetteccagt ecacegtece categtggge attgttgetg geetggetgt ectageagtt gtggtcatcg gagctgtggt cgctgctgtg gtgtgtagga ggaagagctc aggtgga 1017

<210> 890 904 <211> <212> DNA <213> Homo sapiens

<400> 890

gegggteaeg gegeecegaa eceteeteet getgetetgg ggggeagtgg ecetgaeega 60 120 gacctgggct ggctcccact ccatgaggta tttctacacc gccatgtccc ggcccggccg 180 cggggagccc cgcttcatca ccgtgggcta cgtggacgac acgctgttcg tgaggttcga cagcgacgcc acgagtccga ggaaggagcc gcgggcgcca tggatagagc aggaggggcc 300 ggagtattgg gaccgggaga cacagatete caagaccaae acacagaett accgagagag cctgcggaac ctgcgcggct actacaacca gagcgaggcc gggtctcaca ccctccagag 360 420 gatgtttggc tgcgacgtgg ggccggacgg gcgcctcctc cgcgggtacc accaggacgc 480 ctacgacggc aaggattaca tcgccctgaa cgaggacctg agctcctgga ccgccgcgga 540 cacggegget cagateacce agegeaagtg ggaggeggee egtgtggegg ageagetgag agectacetg gagggegagt gegtggagtg geteegeaga tacetggaga aegggaagga 600 660 gacgetgeag egegeggace ecceaaagae acaegtgace eaceaececa tetetgacea tgaggccacc ctgaggtgct gggccctggg cttctaccct gcggagatca cactgacctg 720 780 gcagcgggat ggcgaggacc aaactcagga cactgagctt gtggagacca gaccagcagg 840 agatagaacc ttccagaagt gggcagctgt ggtggtgcct tctggagaag agcagagata 900 cacatgccat gtacagcatg aggggetgcc gaagcccctc accctgagat gggagccgtc ttcc

<210> 891 <211> 546 <212> DNA <213> Homo sapiens

<400> 891

gctcccactc catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace 300 tgctccgcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtttggct gcgacgtggg gccggacggg cgcctcctcc gcgggtacca ccaggacgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

892 <210> <211> 546 <212> DNA <213> Homo sapiens

<400> 892

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece 120 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetec aagaceaaca cacagaetta ccgagagaac etgegeaccg 300 cgetcegeta etacaaccag agegaggeeg ggtetcacae cetccagaat atgtatgget gcgacgtggg gccggacggg cgcctcctcc gcgggtacca ccaggacgcc tacgacggca

aggattacat cgccctgaac gaggacctga gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

180

360

480

720

780

993

840

540 600

240 300

<210> 893 1017 <211> <212> DNA <213> Homo sapiens

893 <400>

60 atgctggtca tggcgccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc 120 gagacetggg ceggetecea etceatgagg tatttetaea eetcegtgte eeggeeegge 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacccagtt cgtgaggttc 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 300 360 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 420 agcatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagtac 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgcgeteetg gacegeegeg 540 gacacggegg ctcagatctc ccagcgcaag ttggaggegg cccgtgtggc ggagcagctg 600 agagcetace tggagggcga gtgcgtggag tggctccgca gatacetgga gaacgggaag 660 gacaagetgg agegegetga ecceecaaag acaeaegtga eccaecaece eatetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggtttctacc ctgcggagat cacactgacc 780 tggcageggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtggacaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg 960 tetteccagt ecacegtece categtggge attgttgetg geetggetgt ectageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga

<210> 894 <211> 993 <212> DNA <213> Homo sapiens

<400> 894

60 gteeteetge tgetetegge ggeeetggee etgacegaga eetgggeegg eteceaetee 120 atgaggtatt tetacacete egtgteeegg eeeggeegeg gggageeeeg etteatetea gtgggctacg tggacgacac ccagttcgtg aggttcgaca gcgacgccgc gagtccgaga gaggagccgc gggcgccgtg gatagagcag gaggggccgg agtattggga ccgggagaca cagateteca agaceaacae acagaettae egagagagee tgeggaacet gegeggetae tacaaccaga gegaggeegg gteteacate atecagagga tgtatggetg egacetgggg 420 cccgacgggc gcctcctccg cgggcatgac cagtccgcct acgacggcaa ggattacatc gccctgaacg aggacctgag ctcctggacc gcggcggaca ccgcggctca gatcacccag cgcaagtggg aggcggcccg tgtggcggag cagctgagag cctacctgga gggcctgtgc gtggagtggc tccgcagata cctggagaac gggaaggaga cgctgcagcg cgcggacccc ccaaagacac acgtgaccca ccaccccgtc tctgaccatg aggccaccct gaggtgctgg 660 gccctgggct tctaccctgc ggagatcaca ctgacctggc agcgggatgg cgaggaccaa actcaggaca ctgagcttgt ggagaccaga ccagcaggag atagaacctt ccagaagtgg gcagctgtgg tggtgccttc tggagaagag cagagataca catgccatgt acagcatgag 900 gggetgeega ageceeteae eetgagatgg gagecatett eccagteeae cateeceate 960 gtgggcattg ttgctggcct ggctgtccta gcagttgtgg tcatcggagc tgtggtcgct actgtgatgt gtaggaggaa gagctcaggt gga

<210> 895 <211> 546 <212> DNA <213> Homo sapiens

300

360

420

600 660

480

540

720

780

822

180

240

300 360

540

600 619

420

480

180 240

accgggagac acagatetec aagaceaaca cacagaetta eegagagae etgeegaace tgegegeta etacaaceag agegaggeeg ggteteacae eetecagagg atgtaegget gegacgtggg geeggaeggg egeeteetee gegggeataa eeagtaegee taegaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeeggae aeggeggete agateteeca gegeaagttg gaggeggeee gtgtggegga geagetgaga geetaeetgg agggegagtg egtggagtgg eteegeagat aeetggagaa egggaaggae aagetggage  24 300 420 480 480	)
---	---

<210> 896

822 <211>

<212> DNA

<213> Homo sapiens

<400>

60 geteceacte catgaggtat ttetacacet cegtgteeeg geceggeege ggggageeee getteatete agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct gegacgtggg geeggacggg cgcctcctcc gegggcataa ccagtacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc agatetecca gegeaagttg gaggeggeee gtgtggegga geagetgaga geetacetgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag àcgctgcagc gcgcggaccc cccaaagaca cacgtgaccc accaccccat ctctgaccat gaggccaccc tgaggtgetg ggeeetgggt ttetaccetg eggagateae aetgacetgg eagegggatg gcgaggacca aactcaggac actgagcttg tggagaccag accagcagga gatagaacct tccagaagtg gacagctgtg gtggtgcctt ctggagaaga gcagagatac acatgccatg tacagcatga ggggctgccg aagcccctca ccctgagatg gg

897 <210>

<211> 619

DNA <212>

<213> Homo sapiens

# <400> 897

60 atgetggtea tggegeeeeg aacegteete etgetgetet eggeggeeet ggeeetgaee gagacctggg ceggetecca etceatgagg tatttetaea ceteegtgte eeggeeegge 120 cgcggggagc cccgcttcat.ctccgtgggc tacgtggacg acacccagtt cgtgaggttc gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag agcatgtacg getgegacgt ggggeeggac gggegeetee teegegggea taaccagtac gcctacgacg gcaaggatta categeeetg aacgaggace tgegeteetg gaeegeegeg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagcgg agageetace tggagggega gtgegtggag tggeteegea gatacetgga gaacgggaag gacaagctgg agcgcgctg

<210> 898

<211> 546

<212> DNA

<213> Homo sapiens

<400> 898	
geteceacte catgaggtat ttetacacet cegtgteeeg geceggeege ggggageece	60
getteatete agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg	120
cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg	180
accggaacac acagatette aagaceaaca cacagaetta eegagagage etgeggaace	240
tgegeggeta etacaaceag agegaggeeg ggteteacae cetecagage atgtaegget	300
gegacgtggg geeggacggg egeeteetee gegggeataa eeagtacgee tacgacggea	360
aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc	420
agatetecca gegeaagttg gaggeggeee gtgtggegga geagetgaga geetaeetgg	480
agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc	540
gcgctg	<b>54</b> 6

<210> 899

<211> 546

<212> DNA

<213> Homo sapiens

<400> 899

geteceaete eatgaggtat ttetacaect eegtgteeeg geeeggeege ggggageeee 60
getteatete agtggetae gtggaegaea eeeagttegt gaggttegae agegaegeeg 12
egagteegag agaggageeg egggeegt ggatagagea ggaggggeeg gagtattggg
acegggagae acagatetee aagaceaaea eacagaetta eegaggaggee etgeggaaee tgegeggeta etacaaecag agegaggeeg ggteteaeae eetecagage atgtaegget gegaeegtggg geeggaeggeeggeeteetee gegggeataa eeagttegee tacgaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeeteetee agateeteea gegeaagttg gaggeggeee gtgtggegga geagetgaga geetaeetgg agggeggatg egtggagtgg eteegaat acetggagaa egggaaggae aagetggage gegetg

546

<210> 900

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 900atgcgggtca cggcaccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc gagacetggg ceggetecea etceatgagg tatttecaea eegecatgte eeggeeegge 180 cgeggggage cccgetteat caccgtggge tacgtggacg acacgetgtt cgtgaggtte 240 gacagegaeg ccaegagtee gaggaaggag cegegggege catggataga gcaggagggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccgggtctca cacttggcag 420 aggatgtatg getgegaeet ggggeeegae gggegeetee teegegggta taaccagtta 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 600 agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegega ecceecaaag acacatgtga eccaecace catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agageagaga tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 960 tetteceagt ecaccatece categtggge attgttgetg geetggetgt ectageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 901

<211> 820

<212> DNA

<213> Homo sapiens

<400> 901

60

60 tcccactcca tgaggtattt ccacaccgcc atgtcccggc ccggccgcgg ggagccccgc 120 ttcatcaccg tgggctacgt ggacgacacg ctgttcgtga ggttcgacag cgacgccacg agtccgagga aggagccgcg ggcgccatgg atagagcagg aggggccgga gtattgggac cgggagacac agatetecaa gaccaacaca cagaettace gagagaacet gegeacegeg ctccgctact acaaccagag cgaggccggg tctcacactt ggcagaggat gtatggctgc gacctggggc ccgacgggcg cctcctccgc gggtataacc agttagccta cgacggcaag gattacateg ecetgaacga ggacetgage teetggaceg eggeggacae egeggeteag atcacccage geaagtggga ggeggeeegt gaggeggage agetgagage etacetggag ggcctgtgcg tggagtggct ccgcagatac ctggagaacg ggaaggagac gctgcagcgc geggaecece caaagacaca tgtgaeceae caececatet etgaecatga ggceaecetg aggtgctggg ccctgggctt ctaccctgcg gagatcacac tgacctggca gcgggatggc gaggaccaaa ctcaggacac cgagcttgtg gagaccagac cagcaggaga tagaaccttc cagaagtggg cagctgtggt ggtgccttct ggagaagagc agagatacac atgccatgta cagcatgagg ggctgccgaa gcccctcacc ctgagatggg

<210> 902

<211> 546

<212> **DNA** 

<213> Homo sapiens

<400> 902

gctcccactc catgaggtat ttccacaccg ccatgtcccg gcccggccgc ggggagcccc getteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta cegagagaac etgeggateg cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagagg atgtatggct gcgacctggg gcccgacggg cgcctcctcc gcgggtataa ccagttagcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

60 120 180

240 300

546

240

300

540 600

780

840

903 <210>

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 903

60 atgcgggtca cggcaccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc 120 gagacetggg eeggeteeca etceatgagg tattteeaca eegecatgte eeggeeegge 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca cacttggcag aggatgtatg getgegacet ggggecegae gggegeetee teegegggta taaceagtta 420 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg agagcetace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecacce catetetgae catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggeaget gtggtggtge ettetggaga agageagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ecaccatece categtggge attgttgetg geetggetgt ectageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

240

480

**540** 

546

300

360 420

60

240

300

360

420

480

660

540 600

780

<212> DNA

<213> Homo sapiens

<400> 904

60 atgcgggtca cggcaccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc 120 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc 240 gacagcgacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggga gacacagate tecaagacca acacacagae ttaccgagag 360 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca cacttggcag 420 aggatgtatg getgegaeet ggggeeegae gggegeetee teegegggta taaccagtta 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gaeegeggeg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 540 600 agagectace tggagggeet gtgegtggag tegeteegea gatacetgga gaacgggaag 660 gagacgctgc agcgcgcgga ccccccaaag acacatgtga cccaccaccc catctctgac 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 905

<211> 546

<212> DNA

<213> Homo sapiens

<400> 905

60 geteceacte catgaggtat ttecacaceg ceatgteeeg geeeggeege ggggageeee 120 getteateae egtgggetae gtggaegaea egetgttegt gaggttegae agegaegeea cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagagg atgtacggct gcgacgtggg gcccgacggg cgcctcctcc gcgggtataa ccagttagcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agateaceca gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetacetgg agggcetgtg cgtggagtgg etcegeagat acetggagaa egggaaggag acgetgeage gcgcgg

<210> 906

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 906

atgcgggtca cggcgcccg aaccgtcctc ctgctgctct ggggggcagt ggccctgacc 120 180 cgcggggagc cccgcttcat tgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagegacg cegegagtee gaggacggag ceeegggege catggataga geaggagggg ccggagtatt gggaccggaa cacacagate ttcaagacca acacacagae ttaccgagag aacctgegga tegegeteeg etaetacaac cagagegagg eegggtetea eacttggeag acgatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagtac gcctacgacg gcaaagatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg agageetace tggagggeet gtgegtggag tggeteegea gacacetgga gaacgggaag gagacgetge agegegegga cececcaaag acacaegtga eccaceaece egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca

ggagatagaa ccttccagaa gtgggcagct gtggtggtgc cttctggaga agagcagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagccc tcaccctgag atgggagcca 900 tcttcccagt ccaccatccc catcgtgggc attgttgctg gcctggctgt cctagcagtt 960 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 907 <211> 1017 <212> DNA

<213> Homo sapiens

<400> 907

60 atgcgggtca cggcgcccg aaccgtcctc ctgctgctct ggggggcagt ggccctgacc 120 gagacetggg eeggeteeca etecatgagg tatttetaca eegecatgte eeggeeegge 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 240 gacagegaeg cegegagtee gaggaeggag ceeegggege catggataga geaggagggg ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag 300 aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccgggtctca cacttggcag 360 420 acgatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagtac gcctacgacg gcaaagatta categeeetg aacgaggace tgageteetg gacegeggeg 480 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 540 agagectace tggagggeet gtgegtggag tggeteegea gacacetgga gaacgggaag 600 660 gagacgetge agegegegga ccccccaaag acacacgtga cccaccaccc cgtctctgac catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca  $tetteceagt\ ceaceatece\ categtggge\ attgttgetg\ geetggetgt\ cetageagtt$ 960 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 908 <211> 546

<212> DNA

<213> Homo sapiens

<400> 908

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece 120 getteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg 180 cgagtccgag gacggagccc cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accggaacac acagatette aagaccaaca cacagaetta eegagagaac etgeggateg 300 cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct 360 gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aagattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc 420 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg 480 agggeetgtg egtggagtgg etcegeagae acetggagaa egggaaggag aegetgeage 540 gcgcgg

546

60

120

300

180 240

<210> 909

<211> 546

<212> DNA

<213> Homo sapiens

<400> 909

geteceaete catgaggtat ttetacaecg ceatgteecg geeggeege ggggageece getteattge agtgggetae gtggaegaea eceagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggegeeat ggatagagea ggaggggeeg gagtattggg aceggaaeae acagatette aagaecaaea eacagaetta eegagagaae etgeggateg egeteegeta etacaaecag agegaggeeg ggteteaeae ttggeagaeg atgtatgget gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca 360
aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc 420
agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg 480
agggcctgtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc 540
gcgcgg 546

<210> 910 <211> 1012 <212> DNA <213> Homo sapiens

<400> 60 atgcgggtca cggcgccccg aaccgtcctc ctgctgctct gggggggcagt ggccctgacc gagacetggg eeggeteeca etecatgagg tatttetaca eegecatgte eeggeeegge 120 180 cgcggggagc cccgcttcat tgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg 240 300 ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag aacctgcgga tegegeteeg etactacaac cagagegagg eegggtetea caettggeag 360 acgatgtatg getgegacgt ggggeeggac gggegeetee teegegggea taaccagtae 420 gcctacgacg gcaaagatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 600 agageetace tggagggeet gtgegtggag tggeteegea gacacetgga gaacgggaag 660 gagacgetge agegegegga ecceccaaag acacatgtga eccaccacce egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1012 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc ag

<210> 911 <211> 1017 <212> DNA <213> Homo sapiens

<400> 911 60 atgegggtea eggegeeeeg aacegteete etgetgetet ggggggeagt ggeeetgace 120 gagacetggg ceggetecea etecatgagg tatttetaea eegecatgte eeggeeegge 180 cgcggggagc cccgcttcat tgcagtgggc tacgtggacg acacccagtt cgtgaggttc 240 gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag 360 aacctgegga tegegeteeg etactacaac cagagegagg eegggtetea eacttggeag 420 acgatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagtac 480 gcctacgacg gcaaagatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 540 gacacegegg ctcagatcae ccagegeaag tgggaggegg cccgtgagge ggagcagetg 600 agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga ecceccaaag acacaegtga eccaecaece egtetetgae catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgce atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 912 <211> 1017. <212> DNA

# <213> Homo sapiens

<400> 912	
atgcgggtca cggcgccccg aaccgtcctc ctgctgctct ggggggcagt ggccctgacc	60
gagacetggg ceggetecea etecatgagg tatttetaea eegeeatgte eeggeeegge	120
cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc	180
gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg	240
ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag	300
aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccgggtctca cacttggcag	360
acgatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagtac	420
gcctacgacg gcaaagatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg	480
gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg	540
agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaaegggaag	600
gagacgetge agegegegga cececcaaag acacaegtga cecaccaece egtetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca	900
tetteceagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 96	60
gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga	1017

913 <210> 1017 <211>

<212> DNA <213> Homo sapiens

<400> 913

atgcgggtca cggcgccccg aaccgtcctc ctgctgctct gggggggcagt ggccctgacc 60 120 gagacetggg ceggetecea etceatgagg tatttetaea eegecatgte eeggeeegge cgcggggagc cccgcttcat tgcagtgggc tacgtggacg acacccagtt cgtgaggttc 180 240 gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggaa cacacagate tteaagacca acacacagae ttaccgagag 360 aacctgegga tegegeteeg etactacaac cagagegagg cegggtetea caettggeag acgatgtatg getgegaegt ggggeeggae gggegeetee teegegggea taaccagtae 420 480 gcctacgacg gcaaagatta categeeetg aacgaggace tgageteetg gaeegeggeg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 540 600 agageetace tggagggeet gtgegtggag gggeteegea gacacetgga gaacgggaag 660 gagacgetge agegegegga ecceccaaag acacaegtga eccaccaece egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ccaccatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 914 <211> 1017

<212>

DNA <213> Homo sapiens

<400> 914

60 atgegggtea eggegeeeg aacegteete etgetgetet ggggggeagt ggeeetgace 120 gagacetggg ceggetecea etceatgagg tatttetaca eegecatgte eeggeeegge cgcggggagc cccgcttcat tgcagtgggc tacgtggacg acacccagtt cgtgaggttc 180 gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg 240 300 ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag 360 aacetgegga tegegeteeg etactacaac cagagegagg eegggtetea catcatecag 420 aggatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagtac

480 gcctacgacg gcaaagatta catcgccetg aacgaggacc tgagctcetg gaccgcggcg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 600 agagectace tggagggeet gtgegtggag tggeteegea gacacetgga gaaegggaag 660 gagacgetge agegegegga ccccccaaag acacacgtga cccaccacce cgtctctgac catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 960 tetteccagt ceaceatece eategtggge attgttgetg geetggetgt eetageagtt gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 915

<211> 822

<212> DNA

<213> Homo sapiens

#### <400> 915

geteceaete eatgaggtat tetacaceg ceatgteceg geceggeege ggggageece getteatege agtgggetae gtggacgaca eccagttegt gaggttegae agegaegeeg egagteegag gaeggageec egggegeecat ggatagagea ggaggggeeg gagtattggg acceggaaeae acagaetete aagaceaaea eacagaetta eegagagaae etgeggateg egeteegeta etacaaeeag agegaggeeg ggteteaeae ttggeagaeg atgtatgget gegaegtggg geeggaegggeeggeeggeeteetee gegggeataa eeagtaegee tacgaeggea aagattaeat egeeetgaae gaggaeetga geteetggae egeggegae aeegeggete agateaeea gegeaagtgg gaggeggeee gtgtggegga geageggaa geetaeetgg agggeetgtg egtggagtgg eteegaagt acetggagaa eegggagaa geetaeetgg agggeetgte getgggattg eteegaagat acetggagaa egggaaggaeee eegagggaee eeeaaagaea eacgtgaeee aceaeeeegt etetgaeeat gaggeeaeee tgaggtgetg ggeeetggge ttetaceetg eggagateae aetgaeetgg eageggatg gegaggaeea aacteaggae actgagettg tggagaeeaa aceageagga gatagaaeet teeagaagtg ggeagetgtg gtggtgeett etggagaaga geagagatae aeatgeeatg tacageatga ggggetgeeg aageeeetea eeetgagatg gg

<210> 916

<211> 546

<212> DNA

<213> Homo sapiens

#### <400> 916

geteceaete eatgaggtat tetacaeeg ceatgteeeg geeeggeege ggggageeee getteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg egagteegag gaegggeee egggegeeat ggatagagea ggaggggeeg gagtattggg aceggaaeae acagaeette aagaeeaaea cacagaetta eegagagaae etgeggateg egeteegeta etacaaeeag agegaggeeg ggteteaeae eeteeagagg atgtaeeget gegaegtggg geeggaegge egeeteetee gegggeataa eeagtaegee taegaeggea aagattaeat egeeetgaae gaggaeetga geteetggae egegeggee aagateaeea gegeaagtgg gaggeegee gtgaggegga geagetgag geetaeetgg agggeetgtg egtggagtgg eteeggaae aeetggagaa gegaaegga gegeetggae gegegg

540 546

480

60

120

300 360

420

 $\frac{180}{240}$ 

60

120

300

360

420

600 660

480

540

720

780 822

180

240

<210> 917

<211> 546

<212> DNA

<213> Homo sapiens

<400> 917

geteceacte catgaggtat ttetacaceg ceatgteecg geeeggeege ggggageece getteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg  $\frac{60}{120}$ 

cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg	180
accggaacac acagatetee aagaceaaca cacagaetta eegagagaac etgeggateg	240
cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct	300
gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca	360
aagattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc	420
agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg	480
agggcctgtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc	540
gcgcgg	546

<210> 918

<211> 1017

<212> DNA

<213> Homo sapiens

## <400> 918

60 atgegggtea eggegeeceg aacegteete etgetgetet ggggggeagt ggeectgace 120 gagacetggg ceggetecca etceatgagg tatttetaea eegecatgte eeggeeegge 180 cgeggggage ceegetteat tgeagtggge taegtggaeg acaeccagtt egtgaggtte 240 gacagegacg cegegagtee gaggaeggag eeeegggege catggataga geaggagggg 300 ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag 360 aacetgegga tegegeteeg etaetaeaac cagagegagg eegggtetea caettggeag 420 acgatgtatg getgegacgt ggggceggac gggegeetee teegegggea taaccagtae gcctacgacg gcaaagatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcaggac 540 600 agagectaec tggagggeet gtgegtggag tggeteegea gacacetgga gaacgggaag gagacgetge agegegegga ecceecaaag acacaegtga eccaecaece egtetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 919

<211> 546

<212> DNA

<213> Homo sapiens

## <400> 919

geteceaete eatgaggtat tetacaeeg ceatgteeeg geeeggeege ggggageeee getteattge agtgggetae gtggaegaea eeeagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggegeeat ggatagagea ggaggggeeg gagtattggg aeeggaaeae acagatette aagaceaaea cacagaetta eegagagaae etgeggateg egeteegeta etacaaeeag agegaggeeg ggteteaeae ttggeagaeg atgtatgget gegaegtggg geeggaeggg egeeteetee geggeataa eeagtaegee tacgaeggea aagattaeat egeeetgaae gaggaeetga geteetggae egeggegae aeegeggete agateaeea gegeaagtgg gaggeggeee gtgtggegga geagetgag geetaeetgg agggeetgtg egtggagtgg eteegeagae aeetggagaa geggaaggag aegetgeage gegegg

<210> 920

<211> 677

<212> DNA

<213> Homo sapiens

<400> 920

tacaccgcca tgtcccggcc cggccgcggg gagccccgct tcattgcagt gggctacgtg

60

120

300

360

**420**.

480

540

546

180

240

120

180

240 300

360

420 480

120

180

240 300

480

540

360 420

60

120

300

180 240

540

546

gacgacaccc agttcgtgag gttcgacagc gacgccgcga gtccgaggac ggagccccgg gcgccatgga tagagcagga ggggccggag tattgggacc ggaacacaca gatcttcaag accaacacac agacttaccg agagaacctg cggatcgcgc tccgctacta caaccagagc gaggccgggt ctcacacttg gcagacgatg tatggctgcg acgtggggcc ggacgggcgc ctcctccgcg ggcataacca gtacgcctac gacggcaagg attacatcgc cctgaacgag gacctgcgct cctggaccgc cgcggacacg gcggctcaga tcacccagcg caagtgggag	120 180 240 300 360 420 480
gcggcccgtg tggcggagca gctgagagcc tacctggagg gcgagtgcgt ggagtggctc cgcagatacc tggagaacgg gaaggagacg ctgcagcgcg cggacccccc aaagacacac	540
	600
taccetgegg agateacact gacetggeag egggatggeg aggaceaaac teaggacact	660
gagettgtgg agaccag	677

<210> 921

<211> 546

<212> DNA

<213> Homo sapiens

## <400> 921

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee getteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatette aagaccaaca cacagaetta ccgagagaac etgeggateg cgctccgcga ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aagattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 922

<211> 546

DNA <212>

<213> Homo sapiens

# <400> 922

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee getteattge agtgggetae gtggaegaea eeeagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatette aagaccaaca cacagaetta eegagagaac etgeggateg cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc gcgcgg

546

<210> 923

546 <211>

<212> DNA

<213> Homo sapiens

### <400> 923

geteceacte catgaggtat ttetacaceg ceatgteecg geeeggeege ggggageece getteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatette aagaccaaca cacagaetta eegagagaac etgeggateg cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct

300 / 702	
gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagttcgcc tacgacggca aagattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcacca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc gcgcgg	360 420 480 540 546
<210> 924 <211> 546 <212> DNA <213> Homo sapiens	
<400> 924 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee getteattge agtgggetae gtggacgaca eceagttegt gaggttegac agegaegeeg egagteegag gacgageee egagteegag gacgageee egagteegag gacgageee egagteega eaceggaacac acagatette aagaccaaca cacagaetta eegagagaac etgeggateg egeteegeta etacaaceag agegaggeeg ggteteacac ttggeagaeg atgtatgget gegaegtggg geeggaeggg egeeteetee gegggeataa acagtaegee tacgaeggea aagattacat egeeetgaac gaggaeetga geteetggae egegggae acegeggete agateaceca gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetacetgg agggeetgt egtggagtgg eteegeagae acetggagaa egggaaggag acgetgeage gegegg	60 120 180 240 300 360 420 480 540 546
<210> 925 <211> 546 <212> DNA <213> Homo sapiens	
<400> 925 geteceaete catgaggtat ttetacaceg ceatgteeg geeeggeege ggggageece getteatege agtgggetae gtggaegaea eceagttegt gaggttegae agegaegeeg egagteegag gaeggageee egagteegag gaeggageee egagtattgga aceggaacae acagatette aagaceaaca cacagaetta eegagagaae etgeggateg egeteegeta etacaaceag agegaggeeg ggteteacae ttggeagaeg atgtatgget gegaeetggg geeggaeggg egeteetee geggeataa ecagttagee tacgaeggaa aggattacat egeetgaae gaggaeetga geteetggae egeggegae acegeggea agateacacea gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetacetgg aggeetgtg egtggagtgg eteegeagat acetggagaa egggaaggag acgetgeage gegegg	240 300 360 420 480
<210> 926 <211> 546 <212> DNA <213> Homo sapiens	
<400> 926 geteceaete catgaggtat ttetacaeeg ceatgteeeg geeeggeege ggggageeee	60

gctcccactc catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc 120 getteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatette aagaceaaca cacagaetta eegagagaac etgeggateg 300 cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aagattacat egeeetgaac gaggaeetga geteetggae egeggeggae aeegeggete agateaceca gegeaagtgg gaggeggece gtgaggegga geagetgaga geetacetgg agggcgagtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc gcgcgg

180 240

360

420

480

540

**546** 

```
<210> 927
<211> 546
<212> DNA
<213> Homo sapiens
<400> 927
```

gctcccactc catgaggtat ttctacaccg ccatgtcccg gcccgccgc ggggagcccc gcttcattgc agtgggctac gtggacgaca cccagttcgt gaggttcgac agcgacgccg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagacttc aagaccaaca cacagactta ccgagagaac ctgcggatcg cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct gcgacgtggg gccggacggg cgtctcctcc gcggttataa ccagtacgcc tacgacggca aagattacat cgccctgaac gaggacctga gctcctggac cgcggcgac accgcggctc agatcaccca gcgcaagtgg gaggcggcc gtgaggcgga gcagctgaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 928 <211> 546 <212> DNA <213> Homo sapiens

<400> 928

<210> 929 <211> 546 <212> DNA <213> Homo sapiens

<400> 929

geteceaete eatgaggtat tetacaeeg ceatgteeeg geeeggeege ggggageeee getteattge agtgggetae gtggaegaea eceagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggegeeat ggatagagea ggaggggeeg gagtattggg aceggaaeae acagatette aagaceaaea eacagaetta eegagagaae etgeggateg egeteegeta etacaaeeag agegaggeeg ggteteaeae ttggeagaeg atgtatgget gegaegtggg geeggaeggg egeeteetee gegggeataa eeagtaegee tacgaeggea aagattaeat egeeetgaae gaggaeetga geteetggae egeggeggae aeegeggete agateaeea gegeaagtgg gaggegeee gtgtggegga geagetgaga acetaeetgg agggeetgtg egtggagtgg eteegeagae aeetggagaa eegeggaggeeggee

**546** 

<210> 930 <211> 546 <212> DNA

<213> Homo sapiens

- 40	Δ-	000
<40	111>	930

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee 120 getteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatette aagaccaaca cacagactga eegagagaac etgeggateg 300 cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct 360 gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aagattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcaggacaga gcctacctgg agggeetgtg egtggagtgg eteegeagae acetggagaa egggaaggag aègetgeage gcgcgg

420 480 540 546

180

240

<210> 931

<211> 546

<212> DNA

<213> Homo sapiens

## <400> 931

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee getteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatette aagaccaaca cacagaetta eegagagaac etgeggateg egeteegeta etacaaccag agegaggeeg ggteteacae ttggcagaeg atgtatgget gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aagattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agateaceca gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetacetgg agggcacgtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc gcgcgg

60

360 420 480

540 546

<210> 932

<211> 546

<212> DNA

<213> Homo sapiens

# <400> 932

geteceacte catgaggtat ttetacaccg ceatgteeeg geeeggeege ggggageece getteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggagggccg gagtattggg accggaacac acagatetge aagaccaaca cacagaetta eegagagaac etgeggateg cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct gegacgtggg geeggacggg egeeteetee gegggeataa eeagtacgee tacgacggea aagattacat cgccetgaac gaggacetga geteetggac egeggeggac accgeggete agatcaccca gegeaagtgg gaggeggcc gtgaggegga geagetgaga geetacetgg agggcetgtg egtggagtgg etcegeagae acetggagaa egggaaggag aegetgeage gcgcgg

60 120 180

240 300

360

420 480 540

546

<210> 933

<211> 546

<212> DNA

<213> Homo sapiens

# <400> 933

geteceacte catgaggtat ttetacaceg ceatgteeg geeeggeege ggggageece getteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatette aagaceaaca cacagaetta eegagagaac etgeggateg cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct

60 120 180

240

300

gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aagattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcctgtg cgtggagtcg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg	360 420 480 540 546
--	---------------------------------

<210> 934

<211> 546

<212> DNA

<213> Homo sapiens

<400> 934

geteceaete eatgaggtat tetacaeeg ceatgteeg geeeggeege ggggageeee geteattee agtgggetae gtggacgaea eecagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggegeeat ggatagagea ggaggggeeg gagtattggg aceggaaeae acagaette aagaeeaaea eacagaetta eegagagaae etgeggateg egeteegeta etacaaeeag agegaggeeg ggteteaeae ttggeagaeg atgtatgget gegaegtggg geeggaeggg egeeteetee gegggeataa eeagtaegee tacgaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeggegae aeegeggete agateaeeea gegeaagtgg gaggegeee gtgaggegga geagetgaga geetaeetgg agggeetgte egtggagtgg eteegeagae aeetggagaa egggaaggag aegetgeage geegeg

360 **42**0 480

 $\begin{array}{c} 180 \\ 240 \end{array}$ 

60

120

300

480 540

546

<210> 935

<211> 546

<212> DNA

<213> Homo sapiens

<400> 935

geteceaete catgaggtat tetacaeeg ecatgteeeg geeeggeege ggggageeee getteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg egagteegag gaeggagaee egggegeeat ggatagagea ggaggggeeg gagtattggg accggaaeae acagatette aagaceaaea eacagaetta eegagagaae etgeggateg egeteegeta etacaaeeag agegaggeeg ggteteaeae ttggeagaeg atgtatgget gegaegtggg geeggaegge egeeteetee gegggeataa ecagtaegee tacgaeggea aagattaeat egeeetgaae gaggaeetga geteetggae egeggeggae acegeggete agateaeeea gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetaeetgg agggeetgtg egtggagtgg eteegeagae acetggagaa egggaaggag aegetgeage gegegg

60

120

420 480 540

546

<210> 936

<211> 546

<212> DNA

<213> Homo sapiens

<400> 936

getcccacte catgaggtat ttetacaccg ceatgteeeg geceggeege ggggageeee getteattge agtgggetae gtggacgaca eccagttegt gaggttegae agegacgeeg egagteegag gaeggageee egggegeeat ggatagagea ggaggggegg gagtattggg accggaacae acagatette aagaceaaca eacagaetta eegaggagae etgeeggateg egeteegeta etacaaccag agegaggeeg ggteteacae ttggeagaeg atgtatgget gegacgtggg geeggaegge egeeteetee gegggeataa ecagtaegee tacgaeggea aagattaeat egeeetgaae gaggaeetga geteetggae egeggegee accgeggete agateacca gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetaeetgg agggeetgte egtgaggegga eeteetgga geagetgaga geetaeetgg agggeetgt egtggagtgg eteegeagae acctggagaa egggaaggag acgetgeage gegegg

300 360

420 480 540

546

<210> 937 <211> 822 <212> DNA <213> Homo sapiens

<400> .937

geteceaete eatgaggtat tetacaceg ceatgteceg geceggeege ggggageece geteatte agtggeeae gtggaegaea eccagttegt gaggttegae agegaegeeg egagteegag gaeggageec egggegeeat ggatagagea ggagggeeg gagtattggg accggaacae acagatette aagaceaaea cacagaetta eegagagaae etgeggateg egeteegeta etacaaceag agegaggeeg ggteteaeae ttggeagaeg atgtatgget gegaegtggg geeggaegge egeeteetee gegggeataa ecagtaegee tacgaeggea aagattaeat egeeetgaae gaggaeetga geteetggae egegeggae accgeggete agateaeea gegeaagtgg gaggeggeee gtgaggegga geageggaga accgeggete agateaeea gegeaagtgg gaggeggeee gtgaggegga geageggaga geetaeetgg agggeetgtg egeggaggee eeceggagaa acctggagaa egeggaggaeee geegggaeee eecaaagaea eacgtgaeea acctggagaa egggaaggaeee tetaceeet gaggateee tetagaeeat gaggeeaeee tgaggtgetg ggeeetggge tetaceetg eggagateae actgaeetgg eageggatg geegaggaeea aactaaggae actgagettg tggagaeea accageagga gatagaaeet tecagaagtg ggeagetgtg gtggtgeett etggagaaga geagagatae acatgceatg tacageatga ggggetgeeg aageeeetea eectgagatg gg

<210> 938 <211> 822 <212> DNA

<213> Homo sapiens

<400> 938

geteceaete eatgaggtat tetacaeeg ceatgteeeg geeeggeege ggggageeee getteattge agtgggetae gtggaegaea eceagttegt gaggttegae agegaegeeg egagteegag gaeggaeee egggegeeat ggatagagea ggaggggeeg gagtattggg aceggaacae acagatette aagaceaaea eacagaetta eegagagaae etgeggateg egeteegeta etacaaeeag agegaggeeg ggteteacae ttggeagaeg atgtatgget gegaegtggg geeggaegge egeeteetee gegggeataa eeagtaegee tacgaeggea aagattaeat egeeetgaae gaggaeetga geteetggae egeggeggae aeegeggete agateaeea gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetaeetgg agggeetgtg egeggaggee eteegeagae aeetggagaa eegeggaee geegggaeee eeaaagaea eaegtgaeee aceaeeeegt etetgaeeat gaggeeggeee tetacaeee tgaggteetg ggeeggaeee tetaceeetg eggagateae aeetggegatg geegggaeee eeeaaagaea eaegtgaeee aeeaeeeegt etetgaeeat gaggeeaeee tgaggtgetg ggeeetggge ttetaceetg eggagateae aetgaeetgg eageggatg geegaggaeea aaetgageetg ttgagaeeagaa aeeageagga gatggaaeet teeagaagtg ggeagetgtg gtggtgeett etggagaaea aeaageagga gatggaaeet teeagaagtg ggeagetgtg gtggtgeett etggagaaga geagagatae aeatgeeatg tacageatga ggggetgeeg aageeetee eeetgagatg gg

<210> 939 <211> 546 <212> DNA

<213> Homo sapiens

<400> 939

geteceaete catgaggtat tetacaecg ceatgteeeg geeeggeege ggggageece geteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg egagteegag gaegggeee egggegeeat ggatagagea ggaggggeeg gagtattggg aceggaacae acagatette aagaceaaea cacagaetta eegagagaae etgeggateg egeteegeta etacaaecag agegaggeeg ggteteaeae ttggeagaeg atgtatgget gegaegtggg geeggaeggg egeeteetee gegggeataa eeagtaegee tacgaeggea aagattaeat egeeetgaae gaggaeetga geteetggae egeggegae aeegeggete agateaeca gegeaagtgg gaggegeee gtgtggegga geagetgaga geetaeetgg agggeggagtg egtggagtgg eteegcagae aeetggagaa egeggaagtg egtggagtgg eteegcagae aeetggagaa egegeage

gcgcgg

546

60

120 180

240 300

360

420

660

60

120

300 360

420

480

540 546

180

240

480

540 600

720

780 822

<210> 940 <211> 822 <212> DNA ·

Homo sapiens <213>

<400> 940

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee getteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatette aagaccaaca cacagaetta ccgagagaac etgeggateg cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aagattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggeetgtg egtggagtgg etcegeagae acetggagaa egggaaggag aegetgeage gegeggacce eccaaagaca caegtgacce accaeceegt etetgaccat gaggecaece tgaggtgctg ggccctgggc ttctaccctg cggagatcac actgacctgg cagcgggatg gcgaggacca aactcaggac actgagettg tggagaccag accagcagga gatagaacct tccagaagtg ggcagctgtg gtggtgcctt ctggagaaga gcagagatac acatgccatg tacagcatga ggggctgctg aagcccctca ccctgagatg gg

<210> 941

<211> 546

<212> DNA

<213> Homo sapiens

#### <400> 941

gctcccactt catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc getteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatette aagaccaaca cacagaetta eegagagaac etgeggateg cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aagattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggeetgtg egtggagtgg eteegeagae acetggagaa egggaaggag aegetgeage gcgcgg

<210> 942

<211> 546

DNA <212>

<213> Homo sapiens

#### <400> 942

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece getteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatette aagaceaaca cacagaetta ccgagagaac etgeggateg cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aagattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

300 360 420

480 540

360

540

600

780

993

840

60

120

180

240

<210> 943 <211> 1017 <212> DNA <213> Homo sapiens

<400> 943

atgegggtea eggegeeeg aacegteete etgetgetet ggggggeagt ggeeetgaee 60 120  ${\tt gagacctggg\ ccggctccca\ ctccatgagg\ tatttctaca\ ccgccatgtc\ ccggcccggc}$ 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgàggttc 240 gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccgggtctca cacttggcag 420 acgatgtatg getgegaegt ggggeeggae gggegeetee teegegggea taaccagtae 480 gcctacgacg gcaaagatta categeeetg aacgaggace tgageteetg gacegeggeg gacacegegg etcagateae ecagegeaag tgggaggegg eccgtgagge ggageagetg 540 600 agageetace tggagggeet gtgegtggag tggeteegea gacacetgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acaeaegtga eccaecaeee egtetetgae 720catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteceagt ceaceatece eategtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 944 <211> 993 DNA <212> <213> Homo sapiens

<400> 944

60 gtcctcctgc tgctctgggg ggcagtggcc ctgaccgaga cctgggccgg ctcccactcc atgaggtatt tetacacege catgteeegg eeeggeegeg gggageeeeg etteattgea 120 gtgggctacg tggacgacac ccagttcgtg aggttcgaca gcgacgccgc gagtccgagg acggagcccc gggcgccatg gatagagcag gaggggccgg agtattggga ccgggagaca 300 cagateteca agaceaacae acagaettae egagagaace tgeggatege geteegetae tacaaccaga gcgaggccgg gtctcacact tggcagacga tgtatggctg cgacgtgggg 420 ccggacgggc gcctcctccg cgggcataac cagtacgcct acgacggcaa agattacatc gccctgaacg aggacctgag ctcctggacc gcggcggaca ccgcggctca gatcacccag 480 cgcaagtggg aggcggcccg tgaggcggag cagctgagag cctacctgga gggcctgtgc gtggagtggc teegeagaca eetggagaac gggaaggaga egetgeageg egeggaeeee ccaaagacac acgtgaccca ccaccccgtc tctgaccatg aggccaccct gaggtgctgg 660 720 gccctggget tetaccetge ggagateaca etgacetgge agegggatgg egaggaceaa actcaggaca ctgagcttgt ggagaccaga ccagcaggag atagaacctt ccagaagtgg gcagctgtgg tggtgccttc tggagaagag cagagataca catgccatgt acagcatgag gggctgccga agcccctcac cctgagatgg gagccatctt cccagtccac catccccatc 900 960 gtgggcattg ttgctggcct ggctgtccta gcagttgtgg tcatcggagc tgtggtcgct actgtgatgt gtaggaggaa gagctcaggt gga

<210> 945 546 <211> <212> DNA Homo sapiens <213>

<400> 945

gctcccactc catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg

	363 / 752	
•	accgggagac acagatetec aagaceaaca cacagaetta eegagagaac etgeggateg egeteegeta etacaaceag agegaggeeg ggteteacae ttggeagaeg atgtatgget gegacgtggg geeggaeggg egeeteetee gegggeataa eeagtaegee tacgaeggea aagattacat egeeetgaac gaggaeetga geteetggae egeggggae accgeggete agateacea gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetaeetgg agggeetgtg egtggagtgg eteegeagae acctggagaa egggaaggag acgetgeage gegegg	240 300 360 420 480 540 546
	<210> 946 <211> 546 <212> DNA <213> Homo sapiens	
	<400> 946 geteceaete catgaggtat ttetacaeeg ceatgteeg geeeggeege ggggageeee getteattge agtgggetae gtggacgaea eccagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaea eacagaetta eegagagaae ttgeggateg egeteegeta etacaaeeag agegaggeeg ggteteaeae ttggeagaeg atgtatgget gegaegtggg geeggaeggg egeeteetee gegggeataa eeagtaegee tacgaeggea aagattaeat egeeetgaae gaggaeetga geteetggae egegeggae acegeggete agateaeea gegeaagtgg gaggeggee gtgaggegga geagetgaga geetaeetgg agggeetgtg egtggagtgg eteeggagaa acetggagaa gegeegge gegeegg	60 120 180 240 300 360 420 480 540 546
	<210> 947 <211> 546 <212> DNA <213> Homo sapiens	
	<400> 947 geteceaete catgaggtat ttetacaeeg ceatgteeeg geeeggeege ggggageeee getteattge agtgggetae gtggaegaea eecagttegt gaggttegae agegaegeeg egagteegag gatggeeee egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegagagaae etgeggateg egeteegeta etacaaeeag agegaggeeg ggteteaeae ttggeagaeg atgtatgget gegaegtggg geeggaeggg egeeteetee gegggeataa eeagtaegee tacgaeggea aagattaeat egeeetgaae gaggaeetga geteetggae egeggegae acegeggete agateaeeca gegcaagtgg gaggeggeee gtgaggegga geagetgaga geetaeetgg agggeetgtg egtggagtgg eteegeagaa acetggagaa egggaaggag acgetgeage gegeegg	60 120 180 240 300 360 420 480 540 546
	<210> 948 <211> 546 <212> DNA <213> Homo sapiens	
	<400> 948 gctcccactc catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc	60

geteceaete catgaggtat tetacaceg ceatgteecg geceggeege ggggageece getteattge agtgggetae gtggaegaea eceagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggegeeat ggatagagea ggaggggeeg gagtattggg acegggagae acagatetee aagaceaaea cacagaetta eegagagaae etgeggateg egeteegeta etacaaceag agegaggeeg ggteteaeae ttggeagaeg atgtatgget gegaegtggg geeggaeggg egeeteetee gegggeataa ecagtaegee taegaeggea aagattaeat egeeetgaae gaggaeetga geteetggae egeggeggae acegeggete agateaeea gegeaagtgg gaggegeee gtgtggegga geagetgaga geetaeetgg agggeetgtg egtggagtgg eteegeagat acetggagaa egggaaggag

120

180

240 300

> 360 420

> > 480

gcgcgg

546

60

120

300 360

420

480

540

546

240

180 240

<210>	949
<211>	1012
<212>	DNA
<213>	Homo sapiens

<400> 949

60 atgegggtea eggegeeceg aacegteete etgetgetet ggggggeagt ggeectgace 120 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 240 gacagcgacg ccgcgagtca gaggacggag ccccgggcgc catggataga gcaggagggg 300 ccggagtatt gggaccggga gacacagatc tccaagacca acacacagac ttaccgagag 360 aacctgegga tegegeteeg etactacaac cagagegagg eegggtetea caettggeag 420 acgatgtatg getgegaegt ggggeeggae gggegeetee teegegggea taaccagtae 480 gcctacgacg gcaaagatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 600 agagectace tggagggeet gtgegtggag tggeteegea gacacetgga gaacgggaag gagacgctgc agegegegga ecceccaaag acacaegtga eccaecaece egtetetgae 660 720 catgaggcca ccctgaggtg ctgggccctg ggettctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ccaccatece categtggge attgttgetg geetggetgt cetageagtt gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc ag 1012

```
<210>
       950
<211>
       546
<212>
       DNA
```

<213> Homo sapiens

<400> 950

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece cetteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetee aagaceaaca cacagaetta ccgagagaac etgeggateg cgetcegeta etacaaceag agegaggeeg ggtetcacae ttggeagaeg atgtatgget gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aagattacat egeeetgaac gaggaeetga geteetggae egeggeggae aeegeggete agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggeetgtg egtggagtgg eteegeagae acetggagaa egggaaggag aegetgeage gcgcgg

<210> 951 1017 <211> <212> DNA <213> Homo sapiens

<400> 951

60 atgegggtea eggegeeeg aacegteete etgetgetet ggggggeagt ggeeetgace gagacctggg ceggetecca etecatgagg tatttetaca eegecatgte eeggeeegge 120 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagegacg cegegagtee gaggaeggag eeeegggege catggataga geaggagggg ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag 300 360 aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccgggtctca catcatccag 420 aggatgtatg gctgcgacct ggggcccgac gggcgcctcc tccgcgggca tgaccagtcc gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gaeegeggeg 480

gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg	540
agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaaegggaag	600
gagacgetge agegegegga cececcaaag acacaegtga cecaceaece egtetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca	900
tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 9	60
gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga	1017

<210> 952

<211> 546

<212> DNA

<213> Homo sapiens

<400> 952

geteceaete eatgaggtat tetacaeeg ecatgteeeg geeeggeege ggggageeee geteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggegeeat ggatagagea ggaggggeeg gagtattggg aceggaaeae acagatette aagaceaaea eacagaetta eegagagaae etgeggateg egeteegeta etacaaeeag agegaggeeg ggteteaeat eateeagagg atgtatgget gegaeetggg geeegaeggg egeeteetee gegggeatga eeagteegee tacgaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egeggegea aeegeggete agateaeea gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetaeetgg agggeetgtg egtggagtgg eteegeagae aeetggagaa eegegggeegg

60

120

**54**6

<210> 953

<211> 546

<212> DNA

<213> Homo sapiens

<400> 953

geteceaete eatgaggtat tetacaeeg ceatgteeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaea eecagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggegeeat ggatagagea ggaggggeeg gagtattggg aceggaaeae acagatette aagaceaaea cacagaetta eegagaggae etgeggaeee tgeteegeta etacaaeeag agegaggeeg ggteteaeat eateeagagg atgtatgget gegaeetggg geeegaeggg egeeteetee gegggeatga eeagteegee taegaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egegeggae aeegeggee agattaeaeea gegeaagtgg gaggeegeee gtgtggegga geagetgaag geetaeetgg agggeetgte egtggagtgg eteegeagat aeetggagaa eegegaaggag aegetgeage gegeegg

60 120 180

240 300

360 420 480

> 540 546

<210> 954

<211> 546

<212> DNA

<213> Homo sapiens

<400> 954

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaea eceagttegt gaggttegae agegaegeeg egagteegag gaeggageee egggegeeat ggatagagea ggaggggeeg gagtattggg aceggaacae acagatette aagaceaaca eacagaetta eegagagaac etgeggateg egeteegeta etacaaceag agegaggeeg ggteteacat eatecagagg atgtattgget gegaeetggg geeegaeggg egeeteetee gegggeatga ecagttegee tacgaeggea aggattacat egeeetgaac gaggaeetga geteetggae egegegeete

60 120 180

240

300 3**6**0

agatcaccca gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetacetgg agggeetgtg egtggagtgg etcegeagat acetggagaa egggaaggag aegetgeage gegegg			
<210> 955 <211> 546 <212> DNA <213> Homo sapiens			
<400> 955 geteceaete eatgaggtat ttetacaeeg ceatgteeeg geeeggeege ggggageeeggetteatege agtgggetae gtggaegaea eecagttegt gaggttegae agegaege egagteegag gaeggageee egggegeeat ggatagagea ggaggggeeg gagtat aceggaacae acagatette aagaceaaea eacagaetta eegagaggee egeteegeta etacaaeeag agegaggeeg ggteteaeat eatecagagg atgtatgg gegaeetggg geeegaeggg egeeteetee gegggeatga eeagteegee tacgaegg aggattaeat egeeetgaae gaggaeetga geteetggae egeggeggae acegeggaagateaeea gaggaeetga gegeeggee gtgtggegga geagetgaga geetaeeagggeetgtg egtggagtgg eteegeagat acetggagaa egggaaggag acgetggggeeggg	teg 120 teggg 180 atcg 240 get 300 tea 360 etc 420 etgg 480		
<210> 956 <211> 546 <212> DNA <213> Homo sapiens			
<400> 956 geteceaete eatgaggtat ttetaeaeeg ceatgteeg geeggeege ggggageeeg getteattge agtgggetae gtggaegaea eecagttegt gaggttegae agegaegee egagteegag gaeggageee egggegeeat ggatagagea ggaggggeeg gagtat aceggaaeae acagatette aagaceaaea cacagaetta eegagagaae etgegge egeteegeta etaeaaeeag agegaggeeg ggteteaeat eatecagagg atgtatgg gegaeettgg geeegaeggg egeeteetee gegggeatga eeagteegee taegaegg aggattaeat egeeetgaae gaggaeetga geteetggae egeggeggae acegegg agateaeea gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetaea agggeetgtg egtggagtgg eteegeagae acetggagaa egggaaggag acgetge gegegg	cg 120 ctggg 180 atcg 240 gct 300 cca 360 ctc 420 ctgg 480		
<210> 957 <211> 546 <212> DNA <213> Homo sapiens			
<400> 957 geteceaete eatgaggtat ttetaeaeeg ceatgteeeg geeggeege ggggageeeg getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaege egagteegag gaeggageee egagteegag gaeggageee egagteegag gaeggageee gggtataaeeggaaeae acagatette aagaceaaea eacagaetta eegaggagae etgeggeegeeggeegggeeg	teg 120 tegg 180 ateg 240 tet 300 tea 360 tet 420 tetg 480		

agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc

480 **54**0

546

gcgcgg

<211> 546	
<212> DNA	
<213> Homo sapiens	
<400> 958	
geteceacte catgaggtat tetacaceg ceatgteeg geeeggeege ggggageece geteatege agtgggetae gtggacgaca eceagttegt gaggttegae agegaegeeg egagteegag gaeggageec egggegeeat ggatagagea ggaggggeeg gagtattggg aceggaacae acagatette aagaceaaca cacagaetta eegagagaac etgeggateg egeteegeta etacaaceag agegaggeeg ggteteacat eatecagagg atgtatgget gegaeetggg geeegaeggg egeeteetee geggeatga ecagteegee tacgaeggea aggattacat egeeetgaac gaggaeetga geteetggae egegeggae acegeggete agateacea gegeaagtgg gaggeggeec gtgaggegga geagetgaga geetacetgg agggeetgtg egtggagtgg eteegeagatacetgg gaggeetgtg egegagatga eegggaaggag geagetgaga gegeetgg	60° 120 180 240 300 360 420 480 540 546
<210> 959	
<211> 546	
<212> DNA	
<213> Homo sapiens	
<400> 959	
geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee	60
getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg	120
cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg	180
accggaacac acagatetec aagaccaaca cacagaetta cegagagaac etgegeaceg	240
cgctccgcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct	300 3 <b>6</b> 0
gcgacctggg gcccgacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca	420
aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg	480
agggeetgtg egtggagtgg etcegeagat acetggagaa egggaaggag aegetgeage	<b>54</b> 0
gcgcgg	<b>54</b> 6
<210> 960	
<210> 900 <211> 1017	
<212> DNA	
<213> Homo sapiens	
<400> 960	60
atgegggtea eggeaceceg aaccetecte etgetgetet ggggggeeet ggeeetgace gagacetggg eeggeteeea etceatgagg tatttetaca eegecatgte eeggeeegge	120
cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc	180
gacagcgacg ccgcgagtcc gagaggggag ccgcggggcgc cgtgggtgga gcaggagggg	240
ccggagtatt gggaccggaa cacacagatc tacaaggccc aggcacagac tgaccgagag	300
agcetgegga acetgegegg etactacaae cagagegagg cegggtetea caettggeag	360
acgatgtatg getgegacet ggggeeggac gggegeetee teegegggea taaceagtta	420 480
geetacgaeg geaaggatta categeeetg aacgaggaee tgageteetg gaeegeggeg gaeacegegg eteagateae eeagegeaag tgggaggegg eeegtgtgge ggageagetg	540
agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag	600
gagacgetge agegegegga cececcaaag acacaegtga cecaceacee catetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca	780
ggagatagaa ccttccagaa gtgggcagct gtggtggtgc cttctggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca	900 so
tetteccagt ceaceatece categtggge attgttgetg geetggetgt ectageagtt gtggteateg gagetgtggt egetaetgtg atgtgtagga ggaagagete aggtgga	1017
ე-იცე-იციან გოგიაგაგი აგ-აოიაგაგ ოაგ-გ-ოგგ <del>ო</del> გგოოგოგიაი ოგგ-გგო	<del>- •</del>

<210> 961 546 <211>

<212>

DNA Homo sapiens <213>

<400> 961

60 geteceacte catgaggtat ttecacacet cegtgteeeg geceggeege ggggageece getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accggaacac acagatetac aaggeecagg cacagaetga eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct gegacetggg geeggaeggg egeeteetee gegggeataa eeagttagee tacgaeggea aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc

240

300

540 600

<210> 962 <211> 1017 <212> DNA

<213> Homo sapiens

<400> 962

60 atgcgggtca cggcaccccg aaccctcctc ctgctgctct gggggggccct ggccctgacc 120 gagacetggg ceggetecea etecatgagg tatttetaea eegecatgte eeggeeegge 180 egeggggage eeegetteat egeagtggge taegtggaeg acaegcagtt egtgaggtte 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggaccggaa cacacagatc tacaaggccc aggcacagac tgaccgagag 360 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca cacttggcag 420 acgatgtatg getgegacet ggggceggac gggcgcetec teegegggca taaccagtta gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeggeg 480 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 540 600 agagcetace tggagggcae gtgcgtggag tggctccgca gatacetgga gaacgggaag 660 gagacgetge agegeggga ecceecaaag acacaegtga eccaecaece catetetgae catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggeaget gtggtggtge ettetggaga agageagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteceagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 963

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 963

60 atgegggtea eggeaceeg aaccetecte etgetgetet ggggggeeet ggeeetgaee gagacetggg eeggeteeca etecatgagg tatttetaca eegecatgte eeggeeegge 120 egeggggage ecceetteat egeagtggge taegtggaeg acaegeagtt egtgaggtte 180 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacagatc tacaaggccc aggcacagac tgaccgagag 360 agcetgegga acetgegegg etactacaac cagagegagg cegggtetea caettggeag 420 acgatgtatg getgegacet ggggeeggac gggegeetee teegegggea taaccagtta gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag gagacgetge agegegegga ecceecaaag acaeaegtga eccaecacee catetetgae 660

720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteceagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 964

<211> 546

<212> DNA

<213> Homo sapiens

#### <400> 964

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee getteatege agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acagatctac aaggcccagg cacagactga ccgagtgagc ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct gcgacctggg gccggacggg cgcctcctcc gcgggcataa ccagttagcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 965

<211> 546

<212> DNA

<213> Homo sapiens

# <400> 965

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece getteatege agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acagatetac aaggeecagg cacagaetga eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

240

300

**540** 

600

60

120

180

240

120

300

360

420

180

240

480

540

546

<210> 966

<211> 1017

<212> DNA

<213> Homo sapiens

#### <400>

atgegggtea eggeaceceg aaccetecte etgetgetet ggggggeeet ggeeetgace 60 gagacetggg eeggeteeca etecatgagg tatttetaca eegecatgte eeggeeegge 120 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgaggttc gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggcgtatt gggaccggaa cacacagate tacaaggcce aggcacagae tgaccgagag 360 agectgegga acetgegegg etactacaac cagagegagg eegggtetea caettggeag acgatgtatg getgegacet ggggeeggac gggegeetee teegegggea taaccagtta 420 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag

gagacgetge agegegegga ecceecaaag acacaegtga eccaecacee catetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca	900
tetteceagt ceaceatece eategtggge attgttgetg geetggetgt eetageagtt 96	30
gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga	1017

<210> 967

<211> 546

<212> DNA

<213> Homo sapiens

#### <400> 967

<210> 968

<211> 546

<212> DNA

<213> Homo sapiens

# <400> 968

geteceaete catgaggtat tetacaceg ceatgteceg geceggeege ggggageece geteatege agtgggetae gtggacgaca egcagttegt gaggttegae agegaegeeg egagteega agaggageeg egggeeegt ggatagagea ggaggggeeg gagtattggg aceggaacae acagatetae aaggeeeagg eacagaetga eegagaggee etgeeggaace tgeegegeta etacaaceag agegaggeeg ggteteacae cetecagagg atgtaegget gegaegtggg geeggaegge egceteetee gegggeataa ecagtaegee taegaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egcegeggee acegeggete agateaceaa gegeaagtgg gaggeegee gtgtggeega geagetgag geetaeetgg agggeettgt egtggagtgg eteegeagat acetggagaa egggaaggag acgetgeage gegegg

<210> 969

<211> 546

<212> DNA

<213> Homo sapiens

### <400> 969

780 840

900

660

720

WO 2003	5/063985	371 / 752	PCT/JP20
gcgcgg	÷		546
<210> <211> <212> <213>	970 546 DNA Homo sapiens		
getteate egagtee aceggaa tgegegg gegacet aggatta agateae	ctc agtgggctac gtggacg gag agaggagccg cgggc acac acagatctac aaggcc cta ctacaaccag agcgag ggg gccggacggg cgcctc acat cgccctgaac gaggac ccca gcgcaagtgg gaggc	ect ccgtgtcccg geccggccgc ggggagcccc aca cgcagttcgt gaggttcgac agcgacgccg gccgt ggatagagca ggaggggccg gagtattggg ccagg cacagactga ccgagagagc ctgcggaacc gccg ggtctcacac ttggcagacg atgtatggct ctcc gcgggcataa ccagttagcc tacgacggca cctga gctcctggac cgcggcgac accgcggctc ggccc gtgtggcgga gcagctgaga gcctacctgg agat acctggagaa cgggaaggag acgctgcagc	60 120 180 240 300 360 420 480 540 546
<210><211><211><212><213>	971 546 DNA Homo sapiens		
getteate egagtee aceggas tgegegg gegacet aggatta agateae	cgc agtgggctac gtggac cgag agaggagccg cgggc acac acagatctac aaggc gcta ctacaaccag agcgag tggg gccggacggg cgcctc acat cgccctgaac gaggac ccca gcgcaagtgg gaggc cgtg cgtggagtgg ctccgc	ccg ccatgtcccg gcccggccgc ggggagcccc gaca cgcagttcgt gaggttcgac agcgacgccg gccgt ggatagagca ggaggggccg gagtattggg ccagg cacagactga ccgagagagc ctgcggaacc gccg ggtctcacac ttggcagatg atgtatggct cctcc gcgggcataa ccagttagcc tacgacggca cctga gctcctggac cgcggcggac accgcggctc ggccc gtgaggcgga gcagctgaga gcctacctgg cagat acctggagaa cgggaaggag acgctgcagc	60 120 180 240 300 360 420 480 540 546
<210> <211> <212> <213>			
gagacc cgcggg gacagc ccggag aacctgc acgatg gcctacg	gtca cggcacccg aaccet etggg ccggctcca ctccat; gagc cccgcttcat cgcagt gacg ccgcgagtcc gagag; tatt gggaccggaa cacac cgga acctgcgcg ctacta tatg gctgcgacct ggggcc gacg gcaaggatta catcgc	cete etgetgetet ggggggeeet ggeeetgace gagg tatttetaca eegeeatgte eeggeeegge ggge tacgtggacg acacgcagtt egtgaggtte gaggag eegegggege egtggataga geaggaggg agate tacaaggeee aggeacagae tgacegagag eaac eagagegagg eegggtetea eacttggeag eggae gggegeetee teegegggea taaceagtta eeetg aacgaggace tgageteetg gacegeggeg geaag tgggaggegg eeegtgtgge ggageagetg	300 360 420 480 540

agagectace tggagggeae gtgegtggag tggetcegea gatacetgga gaacgggaag

tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca

ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga

tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca

gagacgetge agegegega ecceecaaag acacacgtga eccaecace catetetgae catgaggeca ecetgaggtg etgggeeetg ggettetace etgeggagat eacactgace

tcttcccagt ccaccatece categtggge attgttgetg geetggetgt cetageagtt gtggtcateg gagetgtggt egetactgtg atgtgtagga ggaagagete aggtgga 1017

<210> 973 <211> 1017 <212> DNA

<213> Homo sapiens

<400> 973

60 atgegggtea eggeaeceeg aacceteete etgetgetet ggggggeeet ggeeetgaee 120 gagacetggg ceggetecea etecatgagg tatttetaea eegecatgte eeggeeegge 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgaggttc 240 gacagegacg cegegagtee gagagaggag cegegggege egtggataga geaggagggg 300 ccggagtatt gggaccggaa cacacagatc tacaaggccc aggcacagac tgaccgagag 360 agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caettggeag acgatgtatg getgegaeet ggggeeggae gggegeetee teegegggea taaccagtta 420 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeggeg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 600 agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acacaegtga eccaceaece catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tcttcccagt ccaccatccc categtgggc attgttgctg gcctggctgt cctagcagtt gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 974 <211> 1017 <212> DNA <213> Homo sapiens

<400> 974

60 atgcgggtca cggcaccccg aaccetecte etgetgetet ggggggeeet ggccetgace 120 gagacetggg eeggeteeca etecatgagg tatttetaca eegecatgte eeggeeegge 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgaggttc gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 240 ccggagtatt gggaccggaa cacacagatc tacaaggccc aggcacagac tgaccgagag 300 360 agcetgegga acetgegegg etactacaac cagagegagg cegggtetca caccetecag 420 aggatgtacg getgegacet ggggeeggae gggegeetee teegegggea taaccagtta gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gaccgeggeg 480 540 gacaccgegg etcagateae ecagegeaag tgggaggegg ecegtgtgge ggageagetg agagcetace tggagggeet gtgcgtggag tggeteegea gatacetgga gaacgggaag 600 gagacgetge agegegegga ecceecaaag acacaegtga eccaecaece catetetgae 660 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 960 tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 975 <211> 1017

<212> DNA

<213> Homo sapiens

<400> 975

atgegggtea eggeaceeeg aacceteete etgetgetet ggggggeeet ggeeetgace	60
	120
cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc	180
gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg	240
ccggagtatt gggaccggaa cacacagatc tacaaggccc aggcacagac tgaccgagag	300
agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag	360
aggatgtacg getgegaegt ggggeeggae gggegeetee teegegggea tgaccagtee	420
gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg	480
gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg	540
agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag	600
gagacgetge agegegegga ecceecaaag acacatgtga eccaecace catetetgae	660
catgaggeca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca	780
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca	900
tetteccagt ecaccatece categtggge attgttgetg geetggetgt cetageagtt 96	_
gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga	1017

<210> 976

<211> 546

<212> DNA

<213> Homo sapiens

<400> 976

gctcccactc catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc 60 getteatege agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg 120 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accggaacac acagatctac aaggcccagg cacagactga ccgagagagc ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 300 gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagttagcc tacgacggca 360 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc 480 agatcaccca gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetaeetgg agggeetgtg egtggagtgg etcegeagat acetggagaa egggaaggag aegetgeage 540 gcgcgg

180

546

180

240 300

360

420

480 **540** 

546

<210> 977

<211> 546

<212> DNA

<213> Homo sapiens

<400> 977

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee 120 getteattge agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acagatetac aaggeecagg cacagaetga eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aagattacat cgccctgaac gaggacctga geteetggac cgcggcggac accgcggcte agateaceca gegeaagtgg gaggeggece gtgaggegga geagetgaga geetacetgg agggcctgtg cgtggagtgg ctccgcagac acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 978

<211> 546

<212> DNA

<213> Homo sapiens

240

WO 2005/	063985	374 / 752	PCT/JP20
geteceaet getteattg egagteega aceggaae tgegegge gegaegtg aagattae agateaec	c agtgggctac gtggacgaca ccc ag gacggagccc cgggcgccat gg cac acagatctac aaggcccagg ca ta ctacaaccag agcgaggccg gg gg gccggacggg cgctcctcc gcg at cgccctgaac gaggacctga gc ca gcgcaagtgg gaggcggccc gt	gtcccg gcccggccgc ggggagcccc agttcgt gaggttcgac agcgacgccg atagagca ggaggggccg gagtattggg cagactga ccgagagagc ctgcggaacc tctcacac ttggcagacg atgtatggct gggcataa ccagtacgcc tacgacggca tcctggac cgcggcggac accgcggctc gaggcgga gcagctgaga gcctacctgg ctggagaa cgggaaggag acgctgcagc	60 120 180 240 300 360 420 480 540 546
<211> <212>	979 546 DNA Homo sapiens		
geteccaet getteateg egagteeg aceggaac egeteeget gegacetg aggattac agateace	ge agtgggetae gtggaegaea ege gag agaggageeg egggegeegt gg eae acagatetae aaggeeeagg es ta etacaaceag agegaggeeg gg gg geeggaeggg egeeteetee geg eat egeeetgaae gaggaeetga ge eea gegeaagtgg gaggegeee gt	gtcccg gcccggccgc ggggagcccc cagttcgt gaggttcgac agcgacgccg gatagagca ggaggggccg gagtattggg acagactga ccgagagaac ctgcgcaccg tctcacac ttggcagacg atgtatggct gggcataa ccagttagcc tacgacggca tcctggac cgcggcgac accgcggctc tcctggac gcagctgaga gcctacctgg ctggagaa cgggaaggag acgctgcagc	60 120 180 240 300 360 420 480 540
<211> <212>	980 546 DNA Homo sapiens		
geteceae getteate egagteeg aceggga tgegeetg gegacetg aggattae agateae	ge agtgggetae gtggaegaea eg gag agaggageeg egggegeegt g gae acagaagtae aagggeeagg e eta etacaaceag agegaggeeg gg ggg geeggaeggg egeeteetee ge eat egeeetgaae gaggaeetga ge eea gegeaagtgg gaggeggeee g	tgteceg geceggeege ggggageece cagttegt gaggttegae agegaegeeg gatagagea ggaggggeeg gagtattggg cacagaetga eegagagage etgeggaace gteteacae ttggeagaeg atgtatgget gggeataa eeagttagee taegaeggea eteetggae egeggeggae acegeggete tgtggegga geagetgaga geetaeetgg eetggagaa egggaaggag aegetgeage	60 120 180 240 300 360 420 480 540 546

<210> 981 <211> 546 <212> DNA <213> Homo sapiens

<400> 981  ${\tt gctcccactc\ catgaggtat\ ttctacaccg\ ccatgtcccg\ gcccggccgc\ ggggagcccc}$ 60 120 getteatege agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acagatetac aaggeecagg cacagaetga cegagagage etgeggaace tgegeggeta etacaaceag agegaggeeg ggteteacat catecagagg atgtatgget 300

gcgacctggg gcccgacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca	360
aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc	420
agatcaccca gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetaeetgg	480
agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	<b>540</b>
gcgcgg	546

<210> 982 <211> 546 <212> DNA

<213> Homo sapiens

<400> 982

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece 120 getteatege agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg accggaacac acagatetac aaggeecagg cacagaetga eegagagage etgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 360 gcgacetggg gccggacggg cgcctcctcc gcgggcataa ccagttagcc tacgacggca 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agateaceca gegeaagtgg gaggeggeec gtgtggegga geagetgaga geetaeetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc

540 546

180

240

480

180

360

480

540

600

780

840

240 300

895

660

420

240

300

<210> 983 895 <211> <212> DNA

<213> Homo sapiens

<400> 983

atgegggtea eggeaceeeg aaceeteete etgetgetet ggggggeeet ggeeetgace 60 120 gagacetggg ceggetecea etceatgagg tatttetaea eegecatgte eeggeeegge cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgaggttc gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacagatc tacaaggccc aggcacagac tgaccgagag agectgegga acctgegegg ctactacaac cagagegagg cegggtetea cateatecag aggatgtatg getgegaeet ggggeeegae gggegeetee teegegggea tgaceagtte gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg agagcctacc tggagggcct gtgcgtggag tggctccgca gatacctgga gaacgggaag gagacgetge agegegegga cececeaaag acacacgtga eccaceace catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atggg

<210> 984 <211> 1017 <212> DNA <213> Homo sapiens

<400> 984

60 atgegggtea eggeaceeeg aacegteete etgetgetet gggggggagt ggeeetgace 120 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagcgacg ccgcgagtcc gaggatggcg ccccgggcgc catggataga gcaggagggg ccggagtatt gggacgggga gacacggaac atgaaggcet ccgcgcagac ttaccgagag aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccgggtctca catcatccag 360

120

300 360

420

480

540

546

180

240

<210> 985 <211> 546

<212> DNA

<213> Homo sapiens

<400> 985

geteceaete eatgaggtat tetacaeeg eeatgteeeg geeeggeege ggggageeee geteatege agtgggetae gtggaegaea eeagttegt gaggteegae agegaegeeg egagteegag gatggegeee egggegeeat ggatagagea ggaggggeeg gagtattggg aegggggagae aeggaaeatg aaggeeteeg egeagaetta eegagagaae etgeggateg egeteegeta etacaaeeag agegaggeeg ggteteaeat eateeaggtg atgtatgget gegaegtggg geeggaegge egeeteetee gegggeatga eeagtetgee tacgaeggea aggattaeat egeeetgaae gaggaeetga geteetggae egegeggee aeggeggete agateaeeea gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetaeetgg agggeetgte egggeetgt egtggagtgg eteegeagat aeetggagaa egggaaggag aegetgeage gegegg

<210> 986

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 986°

60 atgcgggtca cggcaccccg aaccgtcctc ctgctgctct gggggggcagt ggccctgacc 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 180 240 gacagcgacg ccgcgagtcc gaggatggcg ccccgggcgc catggataga gcaggagggg ccggagtatt gggacgggga gacacggaac atgaaggcct ccgcgcagac ttaccgagag 300 360 aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccgggtctca catcatccag 420 gtgatgtatg getgegaegt ggggeeggae gggegeetee teegegggea taaceagtae 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gacegeggeg 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagcgg 600 agagcetace tggagggeet gtgcgtggag tggeteegea gatacetgga gaacgggaag gagacgetge agegegegga ecceecaaag acacatgtga eccaecacce catetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 780 tggcageggg atggegagga ccaaactcag gacacegage ttgtggagae cagaceagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacatgcc atgtacagca tgaggggctg ccaaagcccc tcaccctgag atgggagcca 900 960  $tettecea at\ ceacegteec\ categtggge\ attgttgetg\ geetggetgt\ cetageagtt$ 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 987

<211> 1017

<212> DNA

<213> Homo sapiens

atgcgggtca cggcaccccg aaccgtcctc ctgctgctct ggggggcagt ggccctgacc 60	
gagacetggg ceggetecea etecatgagg tatttetaea eegecatgte eeggeeegge 120	
cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 180	
gacagcgacg ccgcgagtcc gaggatggcg ccccgggcgc catggataga gcaggagggg 24	0
ccggagtatt gggacggga gacacggaac atgaaggcct ccgcgcagac ttaccgagag 300	)
aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccgggtctca catcatccag 360	
gtgatgtatg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagtac 420	
gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480	
gacacggegg ctcagatcac ccagcgcaag tgggaggegg cccgtgtggc ggagcagctg 540	)
agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaaegggaag 600	)
gagacgetge agegegegga ecceecaaag acacatgtga eccaecacee catetetgae 660	
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720	
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 78	0
ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840	)
tacacatgcc atgtacagca tgaggggctg ccaaagcccc tcaccctgag atgggagcca 900	
tetteceaat ceaeegteee eategtggge attgttgetg geetggetgt eetageagtt 960	
gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga 1017	

<210> 988

<211> 822

<212> DNA

<213> Homo sapiens

#### <400> 988

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageeee 120 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg acggggagac acggaacatg aaggeeteeg egcagaetta eegagagaac etgeggateg 300 cgctccgcta ctacaaccag agcgaggccg ggtctcacat catccaggtg atgtatggct 360 gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acagcggctc agatcaccca gegcaagtgg gaggeggccc gtgtggegga geagetgaga gectaectgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 600 gegeggaece eccaaagaea catgtgaece accaececat etetgaecat gaggeeacee 660 tgaggtgctg ggccctgggc ttctaccctg cggagatcac actgacctgg cagcgggatg gcgaggacca aactcaggac accgagcttg tggagaccag accagcagga gatagaacct tccagaagtg ggcagctgtg gtggtgcctt ctggagaaga gcagagatac acatgccatg tgcagcatga ggggctgcca aagcccctca ccctgagatg gg

<210> 989

<211> 546

<212> DNA

<213> Homo sapiens

# <400> 989

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg acggggagac acggaacatg aaggceteeg egcagaetta eegagagaac etgeggateg cgctccgcta ctacaaccag agcgaggccg ggtctcacat catccaggtg atgtatggct gegaegtggg geeggaeggg egeeteetee gegggtatga eeaggaegee tacgaeggea aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagcggaga gcctacctgg agggeetgtg egtggagtgg etcegeagat acetggagaa egggaaggag aegetgeage gcgcgg

120 180 240

60

180

240

480

540

720

780

822

300 360

420 480 540

240

420

480

540 546

180 240

360

420

480

540

546

<210> 990 <211> 546 <212> DNA <213> Homo sapiens

<400> 990

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece 60 getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg 120 cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gàgtattggg acggggagac acggaacatg aaggcctccg cgcagactta ccgagagaac ctgcggatcg cgctccgcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct 300 gegacetggg geeegaeggg egeeteetee gegggtataa ceagtaegee taegaeggea 360 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc agatcaccca gegeaagtgg gaggeggeee gtgtggegga geageggaga geetacetgg agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 991 <211> 1017 <212> DNA <213> Homo sapiens

<400> 991

atgcgggtca cggcaccccg aaccgtcctc ctgctgctct ggggggcagt ggccctgacc 60 gagacetggg ceggetecea etceatgagg tatttetaea eegecatgte eeggeeegge 120 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 180 240 gacagcgacg ccgcgagtcc gaggatggcg ccccgggcgc catggataga gcaggaggg ccggagtatt gggacggga gacacggaac atgaaggcct ccgcgcagac ttaccgagag 300 aacctgcgga tcgcgctccg ctactacaac cagagcgagg ccgggtctca catcatccag 360 gtgatgtatg getgegaegt ggggeeggae gggegeetee teegegggea tgaceagtee 420 480 gcetacgacg gcaaggatta catcgcctg aacgaggacc tgagctcctg gaccgcggcg gacacggcgg ctcagatcat ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 540 agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag 600 660 gagacgetge agegegega cececcaaag acacatgtga cecaccacec catetetgac 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 840 ggagatagaa cettecagaa gtgggeaget gtggtggtge ettetggaga agageagaga 900 tacacatgcc atgtacagca tgaggggctg ccaaagcccc tcaccctgag atgggagcca tetteceaat ceaeegteee eategtggge attgttgetg geetggetgt eetageagtt 960 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagctc aggtgga

<210> 992 <211> 546 <212> DNA <213> Homo sapiens

<400>

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg 120 cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg acggggagac acggaacatg aaggeeteeg egcagactta eegagagaac etgeggateg cgctccgcta ctacaaccag agcgaggccg ggtctcacat catccaggtg atgtatggct 300 gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc agatcaccca gegcaagtgg gaggeggeee gtgtggegga geagetgaga gectacetgg agggcctgtg cgtggagtcg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 993	
<211> 546	
<211> 010 <212> DNA	
<213> Homo sapiens	
10mo sapiens	
<400> 993	
gctcccactc catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc	60
getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg	120
cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg	180
acgggagac acggaacatg aaggceteeg egeagactta eegagagaac etgeggateg	240
egeteceeta etacaaceag agegaggeeg ggteteacat eatecaggtg atgtatgget	300
gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca	360
aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc	420
agateaccea gegeaagtgg gaggeggeee gtgtggegga geagetgaga geetacetgg	480
aggectgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	540
gcgcgg	546
6~6~66	940
<210> 994	
<211> 546	
<212> DNA	
<213> Homo sapiens	
<400> 994	
geteceacte catgaggtat ttetacaceg ceatgteeg geeeggeege ggggageece	60
getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg	120
cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg	180
acggggagac acggaacatg aaggceteeg egcagaetta eegagagaac etgeggateg	240
cgctccgcta ctacaaccag agcgaggccg ggtctcacat catccaggtg atgtatggct	300
gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca	360
aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac acggcggctc	420
agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcaggacaga gcctacctgg	480
agggeetgtg egtggagtgg etcegeagat acetggagaa egggaaggag aegetgeage	540
gcgcgg	546
•	
<210> 995	
<211> 1017	
<212> DNA	
<213> Homo sapiens	
44005 000	
<400> 995	60
atgegggtea eggegeeeeg aacegteete etgetgetet ggggggeagt ggeeetgace	60
	120
egeggggage ecceptteat egeagtggge taegtggaeg acaeccagtt egtgaggtte	180
gacagegacg cegegagtee gaggaeggag ceeegggege catggataga geaggagggg	
ccggagtatt gggacggga gacacggaac atgaaggcet ccgcgcagac ttaccgagag	300
aacctgegga tegegeteeg etactacaac cagagegagg eegggtetea cateateeag	360 420
aggatgtatg getgegaeet ggggeeegae gggegeetee teegegggea tgaccagtee	420 480
gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gaccgeggeg	480 540
gacaccegeg ctcagatcac ccagegcaag tgggaggegg cccgtgtgge ggagcagetg	600
agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaacgggaag	660
gagacgetge agegegegga cececcaaag acacaegtga eccaceaece egtetetgae	720

catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca

ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga

tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca

tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt

gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

720

960

780

840 900

<210> 996 <211> 1017 <212> DNA <213> Homo sapiens

<400> 996

atgegggtca eggegeceeg aacegteete etgetgetet ggggggeagt ggecetgace 60 120 gagacetggg ceggetecea etecatgagg tatttetaea eegecatgte eeggeeegge 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 240 gacagegaeg cegegagtee gaggaeggag ceeegggege catggataga geaggagggg 300 ccggagtatt gggacggga gacacggaac atgaaggcct ccgcgcagac ttaccgagag 360 aacctgegga tegegeteeg etactacaac cagagegagg eegggtetea caccetecag 420 tggatgtatg gctgcgacct ggggcccgac gggcgcctcc tccgcgggca tgaccagtcc 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 600 agagectace tggaggget gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acacaegtga eccaecacee egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteceagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

997 <210> <211> 619 <212> DNA <213> Homo sapiens

<400> 997

atgegggtea eggegeeeeg aacegteete etgetgetet gggggggeagt ggeeetgace 120 gagacetggg ceggetecea etecatgagg tatttetaea eegecatgte eeggeeegge cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagegacg cegegagtee gaggaeggag ceeegggege catggataga geaggagggg ccggagtatt gggacgagga gacacggaac atgaaggcet ccgcgcagac ttaccgagag aacctgegga tegegeteeg etactacaac cagagegagg eegggtetea cateateeag aggatgtatg gctgcgacct ggggcccgac gggcgcctcc tccgcgggca tgaccagtcc gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gaeegeggeg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg agagectace tggagggeet gtgegtggag tggeteegea gatacetgga gaaegggaag gagacgctgc agcgcgcgg

60

180

360

420

480

120

300

360

420

480

540 546

180

240

540

600

619

240

300

<210> 998 <211> 546 <212> DNA <213> Homo sapiens

<400>

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece getteatege agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggagggccg gagtattggg acggggagae acggaacatg aaggeeteeg egeagaetta eegagagaae etgeggateg egeteegeta etacaaccag agegaggeeg ggteteacat catecagagg atgtatgget gegacetggg geeegaeggg egeeteetee gegggeatga eeagteegee taegaeggea aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agatcaccca gcgcaagttg gaggcggccc gtgcggcgga gcagctgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

	•	
<210>	999	
<211>	546	
<212>	DNA	
<213>	Homo sapiens	
<400>	999	
	ctc catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc	60
gcttcate	cgc agtgggctac gtggacgaca cccagttcgt gaggttcgac agcgacgccg	120
cgagtcc	gag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattgg	
acgggga	agac acggaacatg aaggeeteeg egcagaetta eegagagaac etgeggate	240
cgctccgc	cta ctacaaccag agcgaggccg ggtctcacac cctccagtgg atgtatggct	300
gcgacct	ggg gcccgacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca	360
	cat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc	420
agaicac	cca gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetaeetgg	g 480
gcgcgg	gtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcag	540 546
5-5-55		940
<210>	1000	
<211>	546 DNA	
<212> <213>	DNA Homo sapiens	
~210>	Tiomo sapiens	
<400>	1000	
gctcccac	etc catgaggtat ttctacaccg ccatgtcccg gcccggccgc ggggagcccc	60
	gc agtgggctac gtggacgaca cccagttcgt gaggttcgac agcgacgccg	120
cgagtccg	gag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattgg	g 180
acgggga	agac acggaacatg aaggeeteeg egeagaetta eegagagaac etgeggateg	
grancto	eta ctacaaccag agegaggeeg ggteteacae cetecagtgg atgtatgget ggg geeegaeggg egeeteetee gegggeatga eeagteegee taegaeggea	300 360
	cat egecetgaae gaggacetga geteetggae egeggeggae acegeggete	420
agatcac	cca gcgcaagtgg gaggcggcc gtgtggcgga gcagctgaga gcctacctgg	
agggcct	gtg cgtggagtcg ctccgcagat acctggagaa cgggaaggag acgctgcagc	540
gcgcgg		546
	••	
<210>	100:1	
<211>	1017	
<212>	DNA	
<213>	Homo sapiens	•
<400>	1001	
	tca eggeaceceg aacceteete etgetgetet gggggggeeet ggeeetgace	60
	ggg ccggctccca ctccatgagg tatttctaca ccgccatgtc ccggcccggc	120
cgcgggg	age ceegetteat egeagtggge taegtggaeg acaegeagtt egtgaggtte	180
gacagcg	acg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggaggg	g 240
ccggagta	att gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag	300
aacctgcg	gga tegegeteeg etactacaac cagagegagg cegggtetea caettggcag	360
acgatgta	atg getgegacet ggggeeggae gggegeetee teegegggea taaceagtta	420
geracea	acg gcaaggatta categeeetg aacgaggaee tgageteetg gaeegeggeg	480
agageets	cgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg acc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag	540 600
	tgc agcgcgcgga ccccccaaag acacacgtga cccaccaccc catetetgac	660
	cca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcg	ggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca	
ggagata	gaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacatg	sec atgtacagea tgaggggetg eegaageeee teaceetgag atgggageea	900
		60
gtggtcat	cg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga	1017
	·	

<210> 1002 <211> 1017 <212> DNA <213> Homo sapiens

<400> 1002

atgetggtca tggcgccccg aaccgtcctc etgetgetet eggcggccct ggccctgacc 60 120 180 cgeggggage ecceetteat etcagtggge taegtggaeg acaegcagtt egtgaggtte 240 gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggaatatt gggaccggaa cacacagatc tacaaggccc aggcacagac tgaccgagag 360 agectgegga acetgegegg etactacaac eagagegagg eegggtetea eacecteeag 420 aggatgtacg getgegacgt ggggeeggac gggegeetee teegegggea taaccagtte 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgageteetg gaeegeggeg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg **540** 600 agaacctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 660 gagacgetge agegegegga ecceecaaag acacatgtga eccaecaece catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcageggg atggcgagga ccaaactcag gacacegage ttgtggagae cagaceagea 840 ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteceagt ceaeegtece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga

<210> 1003 <211> 541 <212> DNA

<213> Homo sapiens

<400> 1003

60 geteceacte catgaggtat ttetacacet eegtgteeeg geeeggeege ggggageece 120 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg 180 cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accggaacac acagatetac aaggeecagg cacagactga ccgagagage ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 300 360 gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagttcgcc tacgacggca 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc 480 agateaceca gegeaagtgg gaggeggeee gtgtggegga geagetgaga acetacetgg 540 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 541

<210> 1004 <211> 1017 <212> DNA <213> Homo sapiens

<400> 1004

60 atgetggtea tggegeeceg aacegteete etgetgetet eggeggeeet ggeeetgace 120 gagacetggg ceggetecea etecatgagg tatttetaca eeteegtgte eeggeeegge 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc 240 gacagegaeg cegegagtee aagaggggag cegegggege egtgggtgga geaggagggg ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg 300 360 agectgegga acctgegegg etactacaac cagagegagg cegggtetea caccetecag 420 aggatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca taaccagttc 480 geetacgacg geaaggatta categeeetg aacgaggace tgageteetg gacegeggeg **540** gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcagctg 600 agaacctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag

660 gagacgetge agegeggga cececeaaag acacatgtga cecaceacee catetetgac 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 ggagacagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 960 tetteceagt ecacegtece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc aggtgga

<210> 1005 <211> 1020 <212> **DNA** <213> Homo sapiens

<400> 1005

60 atgetggtca tggcgccccg aaccgtcctc ctgctgctct cggcggccct ggccctgacc 120 gagacctggg ccggctccca ctccatgagg tatttccaca cctccgtgtc ccggcctggc 180 cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacccagtt cgtgaggttc 240 gacagcgacg cegegagtee gagagaggag cegegggege egtggataga geaggagggg 300 ccggagtatt gggaccggaa cacacagatc tgcaaggcca aggcacagac tgaccgagtg ggcctgcgga acctgcgcgg ctactacaac cagagcgagg acgggtctca cacttggcag 360 acgatgtatg getgegacat ggggeeggac gggegeetee teegegggta taaccagtte 420 480 gectaegaeg geaaggatta categeeetg aacgaggaee tgegeteetg gaeegeegeg 540 gacacggegg ctcagatcac ccagcgcaag tgggaggegg cccgtgtggc ggagcagctg 600 agagcetace tggagggega gtgegtggag tggeteegea gacacetgga gaacgggaag 660 gagaegetge agegegegga ecceecaaag acacaegtga eccaecaece catetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca 780 840 ggagatggaa ccttccagaa gtgggcagct gtggtggtgc cttctggaca agaacagaga 900 tacacgtgcc atgtgcagca cgaggggctg caggagccct gcaccctgag atggaagcca 960 tetteccagt ccaccatece categtggge attgttgetg geetggetgt cettgtggte 1020 accetagetg tggtegetgt ggtegetget gtgatgtgta ggaggaagag etcaggtgga

<210> 1006 <211> 1017 <212> DNA <213> Homo sapiens

<400> 1006

60 atgcgggtca cggcgcccg aaccgtcctc ctgctgctct ggggggcagt ggccctgacc 120 gagacetggg ceggetecea etceatgagg tatttetaea eegecatgte eeggeeegge 180 egeggggage eeegetteat tgeagtggge taegtggaeg acacceagtt egtgaggtte gacagegacg cegegagtee gaggacggag ceeegggege catggataga geaggagggg 300 ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac tgaccgagag 360 agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caettggeag 420 acgatgtatg getgegaegt ggggeeggae gggegeetee teegegggea taaccagtae gcctacgacg gcaaagatta categeeetg aacgaggace tgageteetg gaccgeggeg 480 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 540 600 agageetace tggagggeet gtgegtggag tggeteegea gacacetgga gaacgggaag gagacgetge agegegegga ecceecaaag acaeaegtga eccaecacee egtetetgae 660 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteccagt ceaceatece eategtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga

<212> DNA

<213> Homo sapiens

<400> 1007

atgegggtea eggegeeeg aaccgteete etgetgetet ggggggeagt ggeeetgaee 60 120 gagacetggg ceggetecea etceatgagg tatttetaea eegecatgte eeggeeegge 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc 240 gacagegaeg cegegagtee gaggaeggag ceeegggege catggataga geaggagggg 300 ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag agectgegga acetgegegg etactacaac cagagegagg eegggtetea eacftggeag 360 420 acgatgtatg getgegacgt ggggecggac gggegeetee teegegggea taaccagtae 480 gcctacgacg gcaaagatta categeeetg aacgaggace tgageteetg gacegeggeg 540 gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg agagectace tggagggeet gtgegtggag tggeteegea gacacetgga gaacgggaag 600 660 gagacgetge agegegegga ecceecaaag acacaegtga eccaecaece egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga  $tacacatgcc\ atgtacagca\ tgaggggctg\ ccgaagcccc\ tcaccctgag\ atgggagcca$ 900 960 tetteccagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 1008

<211> 546

<212> DNA

<213> Homo sapiens

<400> 1008

60 geteceacte catgaggtat ttetacaceg ceatgteeg geeggeege ggggageece 120 getteattge agtgggetae gtggaegaea eecagttegt gaggttegae agegaegeeg 180 cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg aceggaacac acagatette aagaceaaca cacagaetta eegagagage etgeggaace 240 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct 360 gegaegtggg geeggaeggg egeeteetee gegggeataa eeagtaegee tacgaeggea 420 aagattacat cgccctgaac gaggacetga gctcctggac cgcggcggac accgcggctc 480 agateaceea gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetacetgg 540 agggcetgtg egtggagtgg etcegeagae acetggagaa egggaaggag aegetgeage gcgcgg

546

180 240

300

360

420

480

540

546

<210> 1009

<211> 546

<212> **DNA** 

<213> Homo sapiens

<400> 1009

60 geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece 120 getteattge agtgggetae gtggaegaea eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accggaacac acagatetge aagaccaaca cacagactga eegagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aagattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agateaceca gegeaagtgg gaggeggee gtgaggegga geagetgaga geetacetgg agggeetgtg egtggagtgg eteegeagae acetggagaa egggaaggag aegetgeage gcgcgg

<210> 1010

<211> 822 <212> DNA

<213> Homo sapiens

<400> 1010geteccacte catgaggtat ttetacaceg ceatgteceg geoeggeege getteatege agtgggetae gtgggggggggg	ggagcccc	60
Barrango agreegorac eregacia cocagticat aggiticase aggreegora	190	
The street of th	180	
acceptation academic angle called a called acceptance a	240	
**Sobobbota ctacaactag agcgaggccg ggtctcacac ttopcapaco atotatomet	300	
Boducaras acceptances acceptance to the second of the seco	360	
augustacat egeetigaae gaggaeetga geteetggae egeggeggae accocageta	420	
agaicacca gegeagegg gaggeggeee gtgtggegga geagetgaga geetaectag	480	
assects to the garden of the control	<b>54</b> 0	
so so se de la caracteria de la caracter	600	
"Bubb bubb georgege increcett cagagateae actoacetoo cagagate	660	
bounded addicaggae actgagettg tggagaeeag accageagga gatagaagat	720	
- Tought be becageiging gigging continues and the continues of the continu	780	
tacagcatga ggggctgccg aagcccctca ccctgagatg gg	822	

<210> 1011

<211> 546

<212> DNA

<213> Homo sapiens

<400> 1011

geteceacte catgaggtat ttetacaceg ceatgteeeg geeeggeege ggggageece getteatege agtgggetae gtggacgaca eccagttegt gaggttegae agegaegeeg cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg accgggagac acagatetec aagaceaaca cacagaetta ccgagagage etgeggaace tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca aagattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc agateaccea gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetacetgg agggcetgtg cgtggagtgg etcegeagae acetggagaa egggaaggag acgetgeage gcgcgg

540 600

> 780 840

<210> 1012

<211> 1017

<212> DNA

<213> Homo sapiens

# <400> 1012

atgetggtea tggcgcccg aaccgtecte etgetgetet ggggggcagt ggccetgace	
gagacttggg coggetcon stoot to better the ggggggagt ggccctgacc	60
gagacetggg ceggetecea etceatgagg tatteetaca ceteegtgte eeggeeegge	120
ososses age congerical creaging generating and consequent entrangents	180
- Bacagegaeg cegegagice gagagaggag cegegggege cotogataga goaggagg	~~ O
ccggagtatt gggaccggaa cacacagatc tacaaggcc aggcacagac tgaccgaga	55 4°
agectgegga acctgegggg ctactacaga on aggettagat tgacegaga	
agcetgegga acetgegegg ctactacaac cagagegagg cegggtetca caceetecag	360
asomblade sciedadgi ggggddgad gggdgdddc tooggggga taaccagtae	420
become geaggaila categeette aacgaggace toegeteeta gaccaccaca	480
gadadggdg cicagaicte ceagegeaag ttggaggegg eccetotoge ggageagetg	540
agagectace tggagggga gtgcgtggag tggctccgca gatacetgga gaacgggaag	940
gacaagetgg agreegetga cocceanag aggested gatacetgga gaacgggaag	
gacaagetgg agegegetga cccccaaag acacaegtga cccaccacce catetetgac	660
catgaggeta eccigaggtg ctgggccctg ggtttctacc ctgcggagat cacactgagg	720
"sacageggg alggegagga ccaaacteag gacaetgage ttotogagge cagaecage	a 780
ggagatagaa cettecagaa gtggacaget gtggtggtgc ettetggaga agagcagaga	840
tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagccg	_
tettercagt congestion as totter and at the test of the congestion and the conge	900
tetteccagt ceacegtece eategtggge attgttgetg geetggetgt eetageagtt	960
gtggtcatcg gagctgtggt cgctgctgtg atgtgtagga ggaagagttc tggtgga	1017

546

240

240

300

360

420 480

> 540 600

620

<210> 1013 <211> 546 <212> DNA <213> Homo sapiens

<400> 1013

60 geteceacte catgaggtat ttetacaceg etatgteeeg geeeggeege ggggageece 120 getteatete agtgggetae gtggaegaea egeagttegt gaggttegae agegaegeeg cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 240 accggaacac acagatetac aaggeecagg cacagaetga cegagagage etgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtttggct 360 gegacetggg geeegacggg egeeteetee gegggeataa ceagttagee tacgaeggea 420 aggattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc 480 agateaceea gegeaagtgg gaggeggeee gtgtggegga geaggacaga geetacetgg 540 aggacetgtg egtggagteg etcegeagat acetggagaa egggaaggag aegetgeage gcgcgg

<210> 1014 1017 <211> <212> DNA

<213> Homo sapiens

<400> 1014

60 atgcgggtca cggcaccccg aaccetecte etgetgetet gggggggeet ggeeetgace 120 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg 300 ccggagtatt gggaccggaa cacacagatc tacaaggccc aggcacagac tgaccgagag 360 agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caecetecag 420 aggatgtttg getgegacet ggggeeegac gggegeetee teegegggea taaceagtta 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg gacaccgegg ctcagatcac ccagegcaag tgggaggegg cccgtgtggc ggagcaggac 540 agagectace tggagggeet gtgcgtggag tegeteegea gatacetgga gaacgggaag 600 gagacgetge agegegega ecceecaaag acaeatgtga eccaecace eatetetgae 660 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 840 ggagatagaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 960 tetteceagt ceaceatece categtggge attgttgetg geetggetgt cetageagtt 1017 gtggtcatcg gagctgtggt tgctactgtg atgtgtagga ggaagagctc aggtgga

<210> 1015 <211> 620

<212> **DNA** 

<213> Homo sapiens

<400> 1015

60 atgcgggtca cggcgccccg aaccetecte etgetgetet ggggggcagt ggccetgace 120 gagacetggg ceggetecea etceatgagg tatttetaca eegecatgte eeggeeegge 180 cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacccagtt cgtgaggttc gacagcgacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg ccggagtatt gggaccggaa cacacagatc tacaaggccc aggcacagac tgaccgagag agcetgegga acetgegegg etactacaac cagagegagg eegggtetea cateateeag aggatgtacg getgegacgt ggggceggac gggcgcetec teegegggta tgaccaggac gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc ggagcaggac agagectace tggagggeet gtgegtggag tegeteegea gatacetgga gaacgggaag gagacgetge agegegegb

# SEQUENCE LISTING C

<110>	CANON KABUSHIKI KAISHA	
<120>	Probe set and method for identifying HLA allele	
<130>	G10003828C	
<150> <151>	JP2003-430556 2003-12-25	
<160>	345	
<170>	PatentIn version 3.2	
<210><211><211><212><213>	1 1094 DNA human leukocyte	
gagacctic cgcgagag gacagcg ccggagtt ggatgt ggacaccg agagact ggagatg tggcagtggagatg tacacgtgtttcccagctggtgtttcccagctggtgtttcccagctgtgtttcccagctgtgtttcccagctgtgtttcccagctgtgtttcccagctgtgtttcccagctgtgtttcccagctgtgtttcccagctgtgtttcccagctgtgtttcccagctgtgtttcccagctgtgtcccagctgtgtccccagctgtgtccccagctgtgtccccagctgtgtccccagctgttccccagctgtgtccccagctgtgtccccagctgtgtccccagctgtgtccccagctgtgtccccagctgtgtccccagctgtgtccccagctgtgtccccagctgtgtccccagctgtgtccccagctgtgtccccagctgtgtccccagctgtccccagctgtccccagctgtccccagctgtccccagctgtccccagctgtccccagctgtccccagctgtccccagctgtccccagctgtccccagctgtccccagctgtccccagctgtccccagctgtccccagctgtccccagctgtccccaccagctgtccccaccagctgtccccaccaccaccaccaccaccaccaccaccaccaccac	age ecegetteat eteagtggge tacgtggacg acacgcagtt egtgeggtte acg eegegagtee gagaggggag eegeggege egtgggtgga geaggaggggag ett gggaeegggag gacacagaag tacaagegee aggaeeggag gacacagae tgaeegagtg ga acetgegegg etactacaae eagagegagg eegggtetea eaceeteeag gtg getgegeet ggggeeegae gggegeetee teegegggta tgaeeagtae eeg geaaggatta eategeeetg aacgaggaee tgegeteetg gaeegeegg eeg eteagateae eeggeaggeeggeeggeeggeeggegeeteeggaggeeggee	60 120 180 3 240 300 360 420 480 540 600 660 720 780 840 900 60 1020 1080 1094
<211> <212>	2 1094 DNA human leukocyte	
atgeggt gagacete egeggaga gacagega eeggagta ageetgeg tggatgtg geetaega gacaeego agageeta gagageeta	ca tggcgcccg aaccetcate etgetgetet egggageeet ggceetgace gg cetgeteca etceatgaag tatteettea cateegtgte eeggeetgge 1 age eeggetteat eteagtgge taegtggaeg acaegeagtt egtgeggte aeg eegggagee eggggggag eeggggggag eeggggggg et ggaacagaag tacaagegee aggeacagae tgacegagtg ga acetgeggg etaetacaae eagagegagg eegggetetea eaceeteeag tg getgegaeet ggggeeege gggeetee teegegggta taaceagtte eg geaaggatta eategeeetg aacgaggaee tgegeteetg gacegeegg egg etcagatea eeageggaag tgggaggeg eeetggggeggegeee eeggggggeggegggegg	60 20 180 240 300 360 420 480 540 600 660 720

tetteccage ceaceatece eategtggge ategttgetg geetggetgt eetggetgte 960 etagetgtee taggagetgt ggtggetgtt gtgatgtgta ggaggaagag eteaggtgga 10	780 840 900 020 080 1094
	1034

<210> 3 <211> 1094 <212> DNA

<213> human leukocyte

#### <400> 3

atgegggtea tggegeeeg aacceteate etgetgetet egggageeet ggeeetgaee 60 gagacetggg cetgetecca etceatgaag tatttettea cateegtgte eeggeetgge 120 cgcggagagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgcggttc 180 gacagcgacg cegegagtee gagaggggag eegegggege egtgggtgga geaggagggg 240 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 300 agcetgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag 360 tggatgtgtg gctgcgacet ggggcccgac gggcgcctcc tccgcgggta tgaccagtcc 420 geetaegaeg geaaggatta categeeetg aacgaggaee tgegeteetg gaeegetgeg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg 540 agageetace tggagggeae gtgegtggag tggeteegea gatacetgga gaacgggaag 600 gagacgetge agegegega acacceaaag acacacgtga eccaccatee egtetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca 780 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacgtgcc atgtgcagca cgaggggctg ccagagcccc tcaccctgag atgggagcca 900 tetteccage ceaceatece eategtggge ategttgetg geetggetgt eetggetgte 960 ctagctgtcc taggagctgt gatggctgtt gtgatgtgta ggaggaagag ctcaggtgga 1020 aaaggaggga getgetetea ggetgegtee ageaacagtg eecagggete tgatgagtet 1080 ctcatcgctt gtaa 1094

<210> 4 <211> 546

<212> DNA

<213> human leukocyte

# <400> 4

geteceacte catgaagtat ttetteacat eegtgteeeg geetggeege ggagageeee 60 getteatete agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg 180 accgggagac acagaagtac aagcgccagg cacagactga ccgagtgagc ctgcggaacc 240 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtctggct 300 gegacetggg geeegaeggg egeeteetee gegggtatga eeagtaegee tacgaeggea 360 aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac accgcggctc 420 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacctgg 480 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc **540** gcgcgg 546

<210> 5

<211> 546

<212> DNA

<213> human leukocyte

	000 / 10 <b>2</b>	
-		60 120 180 240 300 360 420 480 540 546
	<210> 6 <211> 546 <212> DNA <213> human leukocyte	
	<400> 6 geteceaete catgaagtat ttetteacat eegtgteeeg geetggeege ggagageece getteatete agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egagteegag agggggeeg egggeegt gggtggagea ggaggggeeg gagtattggg acegggagae acagaagtae aagegeeagg eacagaetga eegagtgage etgeggaaee tgegeggeta etacaaceag agegaggeeg ggteteacae eetecagtgg atgtgtgget gegaeetggg geeegaeggg egeeteetee geaggtatga eeagtaegee taegaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeegggae acegeggete agateaeea gegeaagtgg gaggeggeee gtgaggegga geageggaga geetaeetgg agggeaegtg egtggagtgg eteegeagat acetggagaa egggaaggag aegetgeage gegeegg	60 120 180 240 300 360 420 480 540 546
	<210> 7 <211> 546 <212> DNA <213> human leukocyte	
	getteatete agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egagteegag aggggggeeg egggegeegt gggtggagea ggaggggeeg gagtattggg acegggagae acagaagtae aagegeeagg eacagaetga eegagtgage etgeggaaee tgegeggeta etacaaecag agegaggeeg ggteteaeae eeteeagtgg atgtgtgget gegaeetggg geeeteetee gegggtatga eeagtaegee tacgaeggea	50 120 180 240 300 360 420 480 540 546
	<210> 8 <211> 546 <212> DNA <213> human leukocyte	
	getteatete agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egagteegag aggggageeg egggegeegt gggtggagea ggaggggeeg gagtattggg acegggagae acagaagtae aagegeeagg cacagaetga eegagtgage etgeggaaee tgegeggeta etacaaeeag agegaggeeg ggteteaeae eeteeagtgg atgtgtgget	50 120 180 240 360

aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac accgcggctc	420
agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg	480
agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	540
gcgcgg	546
$\cdot$	

<210> 9 <211> 1094 <212> DNA <213> human leukocyte

<400> 9

atgegggtea tggegeeeg aacceteete etgetgetet egggageeet ggeeetgaee 60 gagacetggg cetgetecca etceatgagg tatttetaca eegetgtgte eeggeecage 120 cgcggagagc cccacttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 180 gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg 240 300 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 360 aacctgegga aactaegegg etactaeaac cagagegagg eegggtetea caeceteeag aggatgtacg gctgcgacct ggggcccgac gggcgcctcc tccgcgggta tgaccagtcc 420 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgcgeteetg gacegeegeg gacacagegg etcagateae ecagegeaag tgggaggegg ecegtgagge ggageagtgg 540 agagcctacc tggagggcga gtgcgtggag tggctccgca gatacctgga gaacgggaag 600 gagacgetge agegegegga acacceaaag acacaegtga eccaceatee egtetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctacggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca 780 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagcca 900 960 tetteceage ceaceatece eategtggge ategttgetg geetggetgt eetggetgte ctagctgtcc taggagctgt ggtggctgtt gtgatgtgta ggaggaagag ctcaggtgga 1020 aaaggagga gctgctctca ggctgcgtcc agcaacagtg cccagggctc tgatgagtct 1080 ctcatcgctt gtaa 1094

<210> 10 <211> 1094 <212> DNA <213> human leukocyte

<400> 10

atgegggtea tggcgececg aaccetecte etgetgetet egggageeet ggeeetgaee 60 gagacctggg cctgctccca ctccatgagg tatttctaca ccgctgtgtc ccggcccagc 120 cgcggagagc cccacttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 180 gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg 240 300 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 360 aacctgcgga aactgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag aggatgtacg gctgcgacct ggggcccgac gggcgcctcc tccgcgggta tgaccagtcc 420 gcctacgacg gcaaggatta categeeetg aacgaggace tgcgcteetg gaccgccgcg 480 gacacagcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg 540 agagcctacc tggagggcga gtgcgtggag tggctccgca gatacctgga gaacgggaag 600 660 gagacgetge agegegega acacceaaag acacaegtga eccaceatee egtetetgae catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctacggagat cacactgacc 720 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca 840 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagcca 900 tetteccage ceaceatece categtggge ategttgetg geetggetgt cetggetgte 960 1020 ctagetgtcc taggagetgt ggtggetgtt gtgatgtgta ggaggaagag etcaggtgga aaaggagga getgetetea ggetgegtee ageaacagtg eecagggete tgatgagtet 1080 ctcatcgctt gtaa 1094

<210> 11

<211> 546

<212> DNA

<213> human leukocyte

### <400> 11

geteceacte catgaggtat ttetacaceg etgtgteeeg geceageege ggagageece actteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacagactga ccgagtgaac ctgcggaaac tgegeggeta etacaaceag agegaggeeg ggteteacae eetecagagg atgtatgget gegacetggg geeegaeggg egeeteetee gegggtatga eeagteegee taegaeggea aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acagcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

546

240

300

540

600

780

840

60 120

180

240

300

360

420

480

540 546

<210> 12

<211> 1015

<212> DNA

<213> human leukocyte

#### <400> 12

60 atgcgggtca tggcgcccg aaccctcctc ctgctgctct cgggagccct ggccctgacc 120 gagacetggg cetgetecea etceatgagg tatttetaea eegetgtgte eeggeeeage 180 egeggagage cecaetteat egeagtggge taegtggaeg acaegeagtt egtgeggtte gacagegaeg cegegagtee aagaggggag cegegggege egtgggtgga geaggagggg ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 360 aacetgegga aactgegegg etactacaac cagagegagg eegggtetea eaceeteeag 420 aggatgtacg getgegacet ggggeeegae gggegeetee teegegggta tgaceagtee 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgegeteetg gaeegeegeg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg agageetace tggagggega gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga acacecaaag acacaegtga eccaceatee egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca ggagatggaa cettecagaa gtgggeaget gtggtggtge ettetggaga agageagaga 900 tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagcca 960 tetteccage ceaceatece categtggge ategttgetg geetggetgt cetggetgte 1015 ctagctgtcc taggagctgt ggtggctgtt gtgatgtgta ggaggaagag ctcag

<210> 13

<211> 546

<212> **DNA** 

<213> human leukocyte

### <400> 13

geteceacte catgaggtat ttetacaceg etgtgteeeg geccageege ggagageece actteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacagactga ccgagtgaac ctgcggaaac tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtatggct gcgacctggg gcccgacggg cgcctcctcc gcgggtatga ccagtccgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

360

420

480

540

180 240

480 540

546

546

180

240 300

<210>	14
<211>	546
<212>	DNA
<213>	human leukocyte

<400> 14

geteceacte catgaggtat ttetacaceg etgtgteeeg geceageege ggagageece 60 actteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg 180 accgggagac acagaagtac aagcgccagg cacagactga ccgagtgaac ctgcggaaac 240 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct 300 gegacetggg geeegaeggg egeeteetee gegggtatga eeagteegee taegaeggea 360 aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acagcggctc 420 480 agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 546 gcgcgg

<210> 15 <211> 546 <212> DNA <213> human leukocyte

#### <400> 15

geteceacte catgaggtgt ttetacaceg etgtgteeeg geecageege ggagageece acttcatcgc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgccg cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacagactga ccgagtgaac ctgcggaaac tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gcgacctggg gcccgacggg cgcctcctcc gcgggtatga ccagtccgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acagcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 16 <211> 546 <212> DNA <213> human leukocyte

#### <400> 16

60 geteceacte catgaggtat ttetacaceg etgtgteeeg geceageege ggagageeee actteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacagactga ccgagtgaac ctgcggaaac tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagtgg atgtatggct 300 360 gcgacctggg gcccgacggg cgcctcctcc gcgggtatga ccagtccgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc 420 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 17 <211> 546 <212> DNA <213> human leukocyte

<4	00	>	1	7

geteceacte catgaggtat ttetacaceg etgtgteeeg geccageege ggagageece 60 acttcatcgc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgccg 120 cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg 180 accgggagac acagaagtac aagcgccagg cacagactga ccgagtgaac ctgcggaaac 240 tgegeggeta etacaaccag agegaggeeg ggtetcacae cetecagagg atgtaegget 300 gegacetggg geeegaeggg egeeteetee gegggeatga eeagttagee tacgaeggea 360 aggattacat egecetgaac gaggacetge geteetggae egeegegae aeggeggete 420 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg 480 agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 gcgcgg 546

<210> 18 <211> 1094

<212> DNA

<213> human leukocyte

#### <400>

atgegggtea tggegeeeg aacceteate etgetgetet egggageeet ggeeetgaee 60 120 egeggggage eccaetteat egeagtggge taegtggaeg acaegeagtt egtgeggtte 180 gacagcgacg ccgcgagtcc gagaggggag ccgcgggcgc cgtgggtgga gcaggagggg 240 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 300 agectgegga acctgegegg etactacaac cagagegagg eegggtetea cateeteeag 360 aggatgtatg gctgcgacgt ggggcccgac gggcgcctcc tccgcgggta tgaccagtcc 420 gectaegaeg geaaggatta categeeetg aacgaggate tgegeteetg gaeegeegeg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 540 agagcctacc tggagggcct gtgcgtggag tggctccgca gatacctgaa gaatgggaag 600 gagacgetge agegegega acacecaaag acacaegtga eccaecatee egtetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagtggg atggggagga ccaaactcag gacactgagc ttgtggagac caggccagca 780 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagcca 900 tetteccage ceaceatece categtggge ategttgetg geetggetgt eetggetgte 960 ctagetgtee taggagetgt ggtggetgtt gtgatgtgta ggaggaagag etcaggtgga 1020 aaaggaggga getgetetea ggetgegtee ageaacagtg eecagggete tgatgagtet 1080 ctcatcgctt gtaa 1094

<210> 19

<211> 1094

<212> DNA

<213> human leukocyte

# <400> 19

atgegggtea tggegeeeeg aacceteate etgetgetet egggageeet ggeeetgaee 60 120 cgcggggagc cccacttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 180 gacagcgacg ccgcgagtcc gagaggggag ccgcgggcgc cgtgggtgga gcaggagggg ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg ageetgegga acetgegegg etactacaac cagagegagg eegggtetca cateetecag 360 aggatgtatg gctgcgacgt ggggcccgac gggcgcctcc tccgcgggta tgaccagtcc 420 geetaegaeg geaaggatta eategeeetg aacgaggate tgegeteetg gaeegeegeg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 540 agagcctacc tggagggcct gtgcgtggag tggctccgca gatacctgaa gaatgggaag 600 gagacgetge agegegega acacceaaag acacacgtga eccaccatee egtetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagtggg atggggagga ccaaactcag gacactgagc ttgtggagac caggccagca 780 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840

240

tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagccg	900
tetteccage ceaceatece categtggge ategttgetg geetggetgt cetggetgte	960
ctagctgtcc taggagctgt ggtggctgtt gtgatgtgta ggaggaagag ctcaggtgga	1020
aaaggagga getgetetea ggetgegtee agcaacagtg eecagggete tgatgagtet	1080
ctcatcgctt gtaa	1094

<210> 20 <211> 1094 <212> DNA <213> human leukocyte

<400>

60 atgcgggtca tggcgcccg aaccetcate etgetgetet egggageeet ggccetgaee 120 gagacetggg eeggeteeca etecatgagg tatttetaca eegetgtgte eeggeeegge 180 cgcggggagc cccacttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 240 gacagcgacg ccgcgagtcc gagaggggag ccgcgggcgc cgtgggtgga gcaggagggg 300 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 360 agcetgegga acctgegegg etactacaac cagagegagg ceaggtetea cateateeag aggatgtatg getgegacgt ggggcccgac gggcgcctcc tccgcgggta tgaccagtac 420 gcctacgacg gcaaggatta catcgccctg aacgaggatc tgcgctcctg gaccgccgcg 480 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 600 agagectace tggaggget gtgegtggag tggeteegea gatacetgaa gaatgggaag 660 gagacgetge agegegegga acacceaaag acacacgtga eccaccatec egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagtggg atggggagga ccaaactcag gacactgagc ttgtggagac caggccagca ggagatggaa cettecagaa gtgggeaget gtggtggtge ettetggaga agageagaga 840 900 tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagccg 960 tetteceage ceaceatece categtggge ategttgetg geetggetgt eetggetgte 1020 ctagetgtcc taggagetgt ggtggetgtt gtgatgtgta ggaggaagag ctcaggtgga 1080 aaaggaggga getgetetea ggetgegtee agcaacagtg eecagggete tgatgagtet 1094 ctcatcgctt gtaa

<210> 21<211> 1094 <212> DNA <213> human leukocyte

# <400> 21

60 atgegggtea tggegeeeg aacceteate etgetgetet egggageeet ggeeetgaee 120 180 cgcggggagc cccacttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagegacg cegegagtee gagaggggag cegegggege egtgggtgga geaggagggg ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg ageetgegga acetgegegg etactacaac cagagegagg ecaggtetca catcatecag aggatgtatg gctgcgacgt ggggcccgac gggcgcctcc tccgcgggta tgaccagtac 480 geetacgacg geaaggatta categeeetg aacgaggate tgegeteetg gacegeegeg gacacggcgg cccagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg agagectace tggagggeet gtgegtggag tggeteegea gatacetgaa gaatgggaag gagacgetge agegegegga acaeceaaag acaeaegtga eccaecatee egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagtggg atggggagga ccaaactcag gacactgagc ttgtggagac caggccagca ggagatggaa ccttccagaa gtgggcagct gtggtggtgc cttctggaga agagcagaga tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagccg  $tettee cage\ ceae category \ category \ at cgttgetg\ geetggetgt\ cetggetgtc$ 960  ${\tt ctagctgtcc}\ {\tt taggagctgt}\ {\tt ggtggctgtt}\ {\tt gtgatgtgta}\ {\tt ggaggaagag}\ {\tt ctcaggtgga}$ 1020 aaaggaggga getgetetea ggetgegtee agcaacagtg cecagggete tgatgagtet 1080 ctcatcgctt gtaa

240

300

540

780 840

1094

600

660

900

360

480

540

546

240

<210> 22 <211> 546 <212> DNA <213> human leukocyte

<400>

geteceacte catgaggtat ttetacaceg etgtgteeeg geeeggeege ggggageece 60 120 acttcatcgc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgccg cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacagactga ccgagtgagc ctgcggaacc 300 tgcgcggcta ctacaaccag agcgaggcca ggtctcacat catccagagg atgtatggct 360 gcgacgtggg acccgacggg cgcctcctcc gcgggtatga ccagtacgcc tacgacggca 420 aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggeetgtg egtggagtgg eteegeagat acetgaagaa tgggaaggag aegetgeage gcgcgg

<210> 23 <211> 1094 <212> DNA

<213> human leukocyte

<400>

60 atgcgggtca tggcgccccg aaccetcate etgetgetet egggageeet ggccetgace 120 180 cgcggggagc cccacttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagtcc gagaggggag ccgcgggcgc cgtgggtgga gcaggagggg ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 300 360 agcetgegga acetgegegg etactacaac cagagegagg eegggtetea cateateeag 420 aggatgtatg getgegaegt ggggeeegae gggegeetee teegegggta tgaceagtae gcetacgacg gcaaggatta categeeetg aacgaggate tgegeteetg gacegeegeg 480 540 gacacggegg ctcagatcac ccagegcaag tgggaggegg cccgtgagge ggagcagetg 600 agagectace tggagggeet gtgegtggag tggeteegea gatacetgaa gaatgggaag 660 gagacgetge agegegega acacceaaag acacaegtga eccaccatee egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagtggg atggggagga ccaaactcag gacactgagc ttgtggagac caggccagca ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagccg tetteccage ceaccatece categtggge ategttgetg geetggetgt eetggetgte 1020 ctagctgtcc taggagctgt ggtggctgtt gtgatgtgta ggaggaagag ctcaggtgga aaaggagga getgetetea ggetgegtee ageaacagtg cecagggete tgatgagtet 1080 1094 ctcatcgctt gtaa

<210> 24

<211> 546

<212> **DNA** 

<213> human leukocyte

<400>

geteceacte catgaggtat ttetacaceg etgtgteeeg geeeggeege ggggageeee acttcatcgc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgccg cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacagactga ccgagtgagc ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtacggct gcgacgtggg gcccgacggg cgcctcctcc gcgggtatga ccagtacgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc agateaceca gegeaagtgg gaggeggece gtgaggegga geagetgaga geetacetgg

120 180

60

240 300

360 420

PCT/JP2004/019763

540 agggcctgtg cgtggagtgg ctccgcagat acctgaagaa tgggaaggag acgctgcagc 546 gcgcgg <210> 25 <211> 546 <212> DNA <213> human leukocyte <400> 25 60 geteceacte catgaggtat ttetacaceg etgtgteeeg geeeggeege ggggageece 120 actteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg 180 240 accgggagac acagaagtac aagcgccagg cacagactga ccgagtgagc ctgcggaacc 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct 360 gcgacgtggg gcccgacggg cgcctcctcc gcgggtatga ccagtacgcc tacgacggca aggattacat cgccctgaac gaggatetgc gctcctggac cgccgcggac acggcggctc 420 480 agatcaccca gegeaagtgg gaggeggecc gtgaggegga geagetgaga gectacetgg 540 agggcctgtg cgtggagtgg ctccgcagat acctgaagaa tgggaaggag acgctgcagc 546 gcgcgg <210> 26 <211> 546 <212> DNA human leukocyte <213> <400> 26 60 geteceacte catgaggtat ttetacaceg etgtgteeeg geeeggeege ggggageece 120 actteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 180 cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg 240 accgggagac acagaagtac aagcgccagg cacagactga ccgagtgagc ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct 300 360 gegaegtggg geeegaeggg egeeteetee gegggtatgt ceagtaegee taegaeggea 420 aggattacat cgccctgaac gaggatetgc getectggac cgccgcggac acggcggctc 480 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg 540 agggcctgtg cgtggagtgg ctccgcagat acctgaagaa tgggaaggag acgctgcagc 546 gcgcgg <210> 27 <211> 546 <212> DNA <213> human leukocyte <400> 60 geteceacte catgaggtat ttetacaceg etgtgteeeg geeeggeege ggggageece 120 acttcatcgc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgccg 180 cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacagactga ccgagtgaac ctgcggaaac 240 300 tgegeggeta etacaaceag agegaggeeg ggteteacat cateeagagg atgtatgget 360 gegaegtggg geeegaeggg egeeteetee gegggtatga eeagtaegee tacgaeggea 420 aggattacat egecetgaac gaggatetge geteetggac egeegeggac aeggeggete 480 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagat acctgaagaa tgggaaggag acgctgcagc 540 gcgcgg 546

DNA <212>

<213> human leukocyte

<400>

60 atgcgggtca tggcgcccg aaccetcate etgetgetet egggagecet ggccetgaee 120 180 cgcggggagc cccacttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagtcc gagaggggag ccgcgggcgc cgtgggtgga gcaggagggg 240 ccggagtatt gggaccggga gacacagaac tacaagcgcc aggcacagac tgaccgagtg 300 360 agectgegga acetgegegg etactacaac cagagegagg eegggtetea cateatecag 420 aggatgtatg getgegaegt ggggeeegae gggegeetee teegegggta tgaccagtae gcctacgacg gcaaggatta catcgccctg aacgaggatc tgcgctcctg gaccgccgcg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 540 agagectace tggaggget gtgegtggag tggeteegea gatacetgaa gaatgggaag 600 gagacgetge agegegegga acacecaaag acacacgtga eccaceatee egtetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagtggg atggggagga ccaaactcag gacactgagc ttgtggagac caggccagca 780 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagccg 960 tetteccage ceaceatece categtggge ategttgetg geetggetgt cetggetgte 1015 ctagctgtcc taggagctgt ggtggctgtt gtgatgtgta ggaggaagag ctcag

<210> 29

<211> 546

<212> DNA

<213> human leukocyte

<400> 29

geteceacte catgaggtat ttetacaceg etgtgteeeg geeeggeege ggggageece 60 120 actteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagae acagaagtae aagegeeagg cacagaetga ccgagtgage etgeggaace 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct gcgacctggg gcccgacggg cgcctcctcc gcgggtatga ccagtacgcc tacgacggca 360 aggattacat egecetgaac gaggatetge geteetggae egeegggae aeggeggete 420 agateaceca gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetacetgg agggeetgtg egtggagtgg eteegeagat acetgaagaa tgggaaggag aegetgeage gcgcgg

540 546

480

180

240

<210> 30

<211> 546

<212> **DNA** 

<213> human leukocyte

<400> 30

geteceacte catgaggtat ttetacaceg etgtgteeeg geeeggeege ggggageece 60 acttcatcgc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgccg cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacagactga ccgagtgagc ctgcggaaac tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct gcgacgtggg gcccgacggg cgcctcctcc gcgggtatga ccagtacgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc agateaceca gegeaagtgg gaggeggee gtgaggegga geagetgaga geetaeetgg agggcctgtg cgtggagtgg ctccgcagat acctgaagaa tgggaaggag acgctgcagc gcgcgg

180

120

<211> 546 <212> DNA <213> human leukocyte <400> 31 geteceacte catgaggtat ttetacaceg etgtgteeeg geeeggeege ggagageece 60 120 getteatete agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg 180 240 accgggagac acagaagtac aagcgccagg cacagactga ccgagtgagc ctgcggaacc 300 tgcgcggcta ctacaaccag agcgaggcca ggtctcacat catccagagg atgtatggct 360 gcgacgtggg gcccgacggg cgcctcctcc gcgggtatga ccagtacgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc 420 480 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg 540 agggcctgtg cgtggagtgg ctccgcagat acctgaagaa tgggaaggag acgctgcagc gcgcgg 546 <210> 32 <211> 546 <212> DNA <213> human leukocyte <400> geteceacte catgaggtat ttetacaceg etgtgteeeg geeeggeege ggggageeee 60 acttcatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg 180 accgggagac acagaagtac aagcgccagg cacagactga ccgagtgagc ctgcggaacc 240 tgcgcggcta ctacaaccag agcgaggcca ggtctcacat catccagagg atgtatggct 300 gcgacgtggg gcccgacggg cgcctcctcc gcgggtatga ccagttagcc tacgacggca 360 aggattacat egecetgaac gaggatetge geteetggae egeegggae aeggeggete 420 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg 480 agggcctgtg cgtggagtgg ctccgcagat acctgaagaa tgggaaggag acgctgcagc 540 546 gcgcgg <210> 33 <211> 1094 <212> DNA <213> human leukocyte <400> atgegggtea tggegeeeg aaceeteate etgetgetet egggageeet ggeeetgaee 60 120 180 cgcggggagc cccacttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagtcc gagaggggag ccgcgggcgc cgtgggtgga gcaggagggg 240 300 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 360 agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccaggtctca caccctccag 420 aggatgtatg gctgcgacgt ggggcccgac gggcgcctcc tccgcgggta tgaccagtac 480 gectacgacg geaaggatta categeeetg aacgaggate tgegeteetg gacegeegeg 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 600 agageetace tggagggeet gtgcgtggag tggctccgca gatacetgaa gaatgggaag gagacgetge agegegegga acacceaaag acacaegtga eccaecatee egtetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 780 tggcagtggg atggggagga ccaaactcag gacactgagc ttgtggagac caggccagca ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagccg

tetteccage ceaceatece categtggge ategttgetg geetggetgt cetggetgte

ctcatcgctt gtaa

ctagctgtcc taggagctgt ggtggctgtt gtgatgtgta ggaggaagag ctcaggtgga aaaggaggga gctgctctca ggctgcgtcc agcaacagtg cccagggctc tgatgagtct 1020

120

300

360

420

480

540 546

180

240

480

60

120

300

360

420 480

180

240

540

546

546

180

240

<210> 34 <211> 546 <212> DNA

<213> human leukocyte

<400>

geteceacte catgaggtat ttetacaceg etgtgteeeg geceggeege ggggageece actteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacagactga ccgagtgagc ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct gcgacgtggg gcccgacggg cgcctcctcc gcgggtatga ccagtccgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac accgcggctc agateaceca gegeaagttg gaggeggeee gtgeggegga geagetgaga geetacetgg agggcacgtg cgtggagtgg ctccgcagat acctgaagaa tgggaaggag acgctgcagc

<210> 35

<211> 546

<212> DNA

<213> human leukocyte

<400>

geteceacte catgaggtat ttetacaceg etgtgteeeg geeeggeege ggggageeee 60 acttcatcgc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgccg 120 cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcggaaac tgcgcggcta ctacaaccag agcgaggacg ggtctcacat cctccagagg atgtatggct 300 gegacgtggg gecegacggg egeeteetee gegggtatga ceagteegee tacgacggea 360 aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc 420 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcctgtg cgtggagtgg ctccgcagat acctgaagaa tgggaaggag acgctgcagc 540 gcgcgg

<210> 36 -

<211> 546

<212> DNA

<213> human leukocyte

<400> 36

geteceacte catgaggtat ttetacaceg etgtgteeeg geeeggeege ggggageeee acticatege agtgggetac gtggacgaca egeagttegt geggttegac agegaegeeg cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacagactga ccgagtgagc ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacat cctccagagg atgtatggct gcgacgtggg gcccgacggg cgcctcctcc gcgggtatga ccagtccgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 37

<211> 1094

<212> **DNA** 

<213> human leukocyte

atgegggtea tggegeeeeg aacceteate etgetgetet egggageeet ggeeetgace 6	60
gagacetggg ceggetecca etceatgagg tattteteca eateegtgte etggeeegge 12	20
cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 1	180
gacagcgacg ccgcgagtcc aagaggggag ccgcgggagc cgtgggtgga gcaggagggg	240
ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg	300
0 00 00 00	360
00 8 8 0 0 0 0000 00 0000 00 00000 00000 00000	120
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	480
gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagcgg	540
agagcetace tggagggcae gtgcgtggag tggeteegea gatacetgga gaa'egggaag	600
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	660
	20
tggcagtggg atggggagga ccaaactcag gacaccgagc ttgtggagac caggccagca	780
ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacgtgcc atgttcagca cgaggggctg ccggagcccc tcaccctgag atggaagccg	900
tetteccage ceaceatece categtggge ategttgetg geetggetgt cetggetgte 960	}
2 2 20 2 20 20 2 2 2 2 2 2 2 2 2 2 2 2	020
	.080
ctcatcgctt gtaa	1094

<210> 38

<211> 546

<212> DNA

<213> human leukocyte

<400> 38

geteceacte catgaggtat ttetecacat cegtgteetg geeeggeege ggggageeee 60 getteatege agtgggetae gtggaegaea caeagttegt geggttegae agegaegeeg 120 cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcggaaac tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggct gcgacctggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc agateaceca gegeaagtgg gaggeggee gtgaggegga geageggaga geetacetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

60

180

240

300

540

600

780

840

900

360

420

480

660

720

<210> 39

<211> 1094

<212> DNA

<213> human leukocyte

<400>

atgcgggtca tggcgccccg aaccetcate etgetgetet egggageeet ggecetgace gagacctggg ccggctccca ctccatgagg tatttctaca ccgctgtgtc ccggcccagc 120 cgcggagagc cccacttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagegacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg aacctgcgga aactgcgcgg ctactacaac cagagcgagg acgggtctca caccctccag aggatgtttg gctgcgacct ggggccggac gggcgcctcc tccgcgggta taaccagttc gcctacgacg gcaaggatta catcgccctg aacgaggatc tgcgctcctg gaccgccgcg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagcgg agagcctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag gagacgetge agegegegga acacceaaag acacaegtga eccaceatee egtetetgae catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagtggg atgggggga ccaaactcag gacaccgagc ttgtggagac caggccagca ggagatggaa ccttccagaa gtgggcagct gtggtggtgc cttctggaga agagcagaga tacacgtgcc atgttcagca cgaggggctg ccggagcccc tcaccctgag atggaagccg

tetteccage ceaceatece categtggge ategttgetg geetggetgt eetggetgte 96 ctagetgtee taggagetgt ggtggetgtt gtgatgtgta ggaggaagag eteaggtgga aaaggaggga getgetetea ggetgegtee ageaacagtg eecagggete tgatgagtet eteategett gtaa	30 1020 1080 1094
<210> 40 <211> 546 <212> DNA <213> human leukocyte	
<400> 40 geteceaete eatgaggtat tetecaeat eegtgteetg geeeggeege ggggageece geteatege agtgggetae gtggacgaea egeagttegt geggttegae agegaegeeg egagteeaag aggggageeg egggageegt gggtggagea ggaggggeeg gagtattggg acegggagae acagaagtae aagegeeagg eacaggetga eegagtgaae etgeggaaae tgegeggeta etacaaecag agegaggaeg ggteteaeae eetecagagg atgtttgget gegaeetggg geeggaeggg egeeteetee gegggtataa eeagttegee tacgaeggea aggattaeat egeeetgaae gaggatetge geteetggae egeeteetee agateaecea gegeagtgg gaggeggee gtgaeetggae aegeeggete agateaecea gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetaeetgg agggeaegtg egtggagtgg eteegeagat acetggagaa egggaaggag aegetgeage geegegg	
<210> 41 <211> 546 <212> DNA <213> human leukocyte	
<400> 41 geteceacte catgaggtat ttetecacat cegtgteetg geceggeege ggggageece getteatege agtgggetae etggacgaca egeagttegt geggttegae agegageege egagteeaag aggggageeg egggageegt gggtggagea ggaggggeeg gagtattggg acegggagae acagaagtae aagegeeagg cacaggetga eegagtgaae etgegggaae tegegggeta etacaaceag agegaggaeg ggteteacac eetecagagg atgtttgget gegacetggg geeggaeggg egeeteetee gegggtataa eeagttegee tacgaeggea aggattaeat egeetgaae gaggatetge gteetggae egeeteete agateacea gegeaagtgg gaggeggeee gtgaggggag geageggaa gegeggete agateacea gegeaagtgg gaggeggeee gtgaggegga geageggaga geetaeetgg agggeaegtg egtggagtgg eteegeagat acetggagaa egggaaggag aegetgeage gegegg	
<210> 42 <211> 546 <212> DNA <213> human leukocyte	
<400> 42 geteceacte catgaggtat ttetacaceg etgtgteeeg geceageege ggagageece actteatege agtgggetae gtggaegaca egeagttegt geggttegae agegaegeeg egagteeaag aggggageeg egggeeegt gggtggagea ggaggggeeg gagtattggg acegggagae acagaagtae aagegeeagg eacaggetga eegagtgaae etgeggaaae tgegeggeta etacaaceag agegaggaeg ggteteacae eetecagagg atgtttgget gegaeetggg geeggaeggg egeeteetee gegggtataa eeagtegee tacgaeggea aggattacat egeeetgaae gaggatetge geteetggae egeegeggee agateacea gegeaagtgg gaggeggee gtgaggegga geagetgaga geagetgaga getacetgg aggeeacgtg egtggagtgg etecgeagat acetggagaa egggaaggag acgetgeage gegegg	

PCT/JP2004/019763

480

540

**546** 

<210> 43	
<211> 546	
<212> DNA	
<213> human leukocyte	
<400> 43	
geteceacte catgaggtat ttetecacat cegtgteetg geeeggeege ggggageece	60
getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegee	g 120
cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtatt	ggg 180
accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga	
tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggc	
gcgacctggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggc	
aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggct	c 420
agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacc	tgg 480
agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgc	
gcgcgg	546
<210> 44	
<211> 546	
<212> DNA	
<213> human leukocyte	
<400> 44	
geteceacte catgaggtat ttetecacat cegtgteetg geeeggeege ggggageece	60
getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg	
	$_{ m 2}$ 120
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt	
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga	ggg 180 aac 240
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggc	ggg 180 aac 240 t 300
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggc gcgacctggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggc	ggg 180 aac 240 t 300 a 360
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggc gcgacctggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc	ggg 180 aac 240 t 300 a 360 c 420
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggc gcgacctggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacct	ggg 180 aac 240 t 300 a 360 c 420 tgg 480
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggc gcgacctggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacct agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgca	ggg 180 aac 240 t 300 a 360 c 420 tgg 480 gc 540
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggc gcgacctggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacct	ggg 180 aac 240 t 300 a 360 c 420 tgg 480
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggc gcgacctggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacct agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgca	ggg 180 aac 240 t 300 a 360 c 420 tgg 480 gc 540
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggc gcgacctggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacct agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgca	ggg 180 aac 240 t 300 a 360 c 420 tgg 480 gc 540
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggc gcgacctggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacct agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgca gcgcgg  <210> 45 <211> 546	ggg 180 aac 240 t 300 a 360 c 420 tgg 480 gc 540
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggc gcgacctggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggatctgc gtcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacct agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgca gcgcgg  <210> 45 <211> 546 <212> DNA	ggg 180 aac 240 t 300 a 360 c 420 tgg 480 gc 540
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggc gcgacctggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacct agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgca gcgcgg  <210> 45 <211> 546	ggg 180 aac 240 t 300 a 360 c 420 tgg 480 gc 540
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggc gcgacctggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggatctgc gtcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacct agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgca gcgcgg  <210> 45 <211> 546 <212> DNA	ggg 180 aac 240 t 300 a 360 c 420 tgg 480 gc 540
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggc gcgacctggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacgggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggcc gtgaggcgga gcagcggaga gcctacct agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgca gcgcgg  <210> 45 <211> 546 <212> DNA <213> human leukocyte <400> 45 gctcccactc catgaggtat ttctccacat ccgtgtcctg gccggcggggagcccc	ggg 180 aac 240 t 300 a 360 c 420 tgg 480 gc 540 546
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggc gcgacctggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggcc gtgaggcgga gcagcggaga gcctacct agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgca gcgcgg  <210> 45 <211> 546 <212> DNA <213> human leukocyte <400> 45 gctcccactc catgaggtat ttctccacat ccgtgtcctg gccggccgc ggggagcccc gcttcatcgc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgcg gcttcatcgc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgcg	ggg 180 aac 240 t 300 a 360 c 420 tgg 480 gc 540 546
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggc gcgacctggg gccggacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggcc gtgaggcgga gcagcggaga gcctacct agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgca gcgcgg  <210> 45 <211> 546 <212> DNA <213> human leukocyte  <400> 45 gctcccactc catgaggtat ttctccacat ccgtgtcctg gccggccg ggggagcccc gcttcatcgc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgcc gcttcatcgc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgcc cgagtccaag aggggagccc cgggagccgt gggtggagca ggagggccg gagtatt	ggg 180 aac 240 t 300 a 360 c 420 tgg 480 gc 540 546  60 t 120 ggg 180
cgagtccaag aggggagccg cgggagccgt gggtggagca ggagggccg gagtatt accgggagac acagagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggcgcgacctggg gccgacctggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggccaggacca agggcctgaagtcacca gcgcaagtgg gaggcggcc gtgaggcgga gcagcggag gcctacct agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgca gcgcgg  <210> 45 <211> 546 <212> DNA <213> human leukocyte  <400> 45 gctcccactc catgaggtat ttctccacat ccgtgtcctg gccggccgc ggggagcccc gcttcatcgc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgcgc gagtccaag aggggagccg cgggagccg cgggtccaag agggggaccg cgggagccg gggtgagca cacagactga ccgagtcaag aggggagccg cgggagccg cacagactga ccgagtgaac ctgcggagacaccgggagaca cacagaagtac aagcgccagg cacagactga ccgagtgaac ctgcggagacaccgggagaca cacagactga ccgagtgaac ctgcggagacacccgggagacaacacagaagtac aagcgccagg cacagactga ccgagtgaac ctgcggagacaacacggagagacaacacagagacaacacagactgaacacacagagaacaccagacacacagactgaacacacagactgaacacacagactgaacacacac	ggg 180 aac 240 t 300 a 360 c 420 cgg 480 gc 540 546  60 g 120 ggg 180 aac 240
cgagtccaag aggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggcgcgacctggg gccgacctgg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggca aggaccacca aggaccacca gcgcaagtgg gaggcggcc gtgaggcgga gcagcggag gcctacct agggcctgt cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgca agggcctgt cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgca gcgcgg  <210> 45 <211> 546 <212> DNA <213> human leukocyte <400> 45 gctcccactc catgaggtat ttctccacat ccgtgtcctg gcccggccgc ggggagcccc gcttcatcgc agtggctac gtggacgaca cgcagttcgt gcgttcgac agcgacgcgc cgagtccaag agggggagccg cgggagccgt gggtggagca ggaggggccg gagtatt accgggagac acagaagtac aagcgccagg cacagactga ccgagtgaac ctgcggattggcgcgcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggctgggcgcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggct	ggg 180 aac 240 t 300 a 360 c 420 tgg 480 gc 540 546  60 t 120 ggg 180 aac 240 t 300
cgagtccaag aggggagccg cgggagccgt gggtggagca ggagggccg gagtatt accgggagac acagagtac aagcgccagg cacaggctga ccgagtgaac ctgcgga tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtttggcgcgacctggg gccgacctggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggccaggacca agggcctgaagtcacca gcgcaagtgg gaggcggcc gtgaggcgga gcagcggag gcctacct agggcctgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgca gcgcgg  <210> 45 <211> 546 <212> DNA <213> human leukocyte  <400> 45 gctcccactc catgaggtat ttctccacat ccgtgtcctg gccggccgc ggggagcccc gcttcatcgc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgcgc gagtccaag aggggagccg cgggagccg cgggtccaag agggggaccg cgggagccg gggtgagca cacagactga ccgagtcaag aggggagccg cgggagccg cacagactga ccgagtgaac ctgcggagacaccgggagaca cacagaagtac aagcgccagg cacagactga ccgagtgaac ctgcggagacaccgggagaca cacagactga ccgagtgaac ctgcggagacacccgggagacaacacagaagtac aagcgccagg cacagactga ccgagtgaac ctgcggagacaacacggagagacaacacagagacaacacagactgaacacacagagaacaccagacacacagactgaacacacagactgaacacacagactgaacacacac	ggg 180 aac 240 t 300 a 360 c 420 tgg 480 gc 540 546  60 g 120 ggg 180 aac 240 t 300 a 360

agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacctgg

agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc

<210> 46

gcgcgg

<211> 1094

<212> DNA

<213> human leukocyte

atgcgggtca tggcgccccg aaccetcate etgetgetet egggageeet ggccetgace	60
	120
cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcagttc	180
gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg	240
ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg	300
aacctgcgga aactgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag	360
aggatgtatg getgegacet ggggcccgae gggcgcctcc teegegggta taaccagtte	420
gcctacgacg gcaaggatta catcgccctg aatgaggacc tgcgctcctg gaccgccgcg	480
gacaaggegg etcagateae ecagegeaag tgggaggegg ecegtgagge ggageagegg	<b>54</b> 0
agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaacgggaag	600
aagacgctgc agcgcgcgga acacccaaag acacacgtga cccaccatcc cgtctctgac	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca	780
ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacgtgcc atgtgcagca cgaggggctg ccagagcccc tcaccctgag atgggggcca	900
tetteccage ceaceatece eategtggge ategttgetg geetggetgt eetggetgte 96	30
ctagctgtcc taggagctgt gatggctgtt gtgatgtgta ggaggaagag ctcaggtgga	1020
aaaggaggga getgetetea ggetgegtee agcaacagtg eecagggete tgatgagtet	1080
ctcatcgctt gtaa	1094

<210> 47 <211> 546 <212> DNA

<213> human leukocyte

#### <400> 47

geteceacte catgaggtat ttetacaceg cegtgteeeg geceggeege ggagageece getteatege agtgggetae gtggaegaea egeagttegt geagttegae agegaegeeg cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacagactga ccgagtgaac ctgcggaaac tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtatggct gegacetggg gecegaeggg egeeteetee gegggtataa ceagttegee tacgaeggea aggattacat egecetgaat gaggacetge geteetggae egeegeggae aaggeggete agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacctgg agggcatgtg cgtggagtgg ctgcgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

60

120

300

360

420

180

240

480

540

546

240

300

540 600

780

<210> 48 <211> 1094 <212> DNA <213> human leukocyte

# <400>

60 atgcgggtca tggcgccccg aaccctcatc ctgctgctct cgggagccct ggccctgacc 120 gagacetggg cetgetecea etceatgagg tatttetaca eegeegtgte eeggeeegge 180 cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcagttc gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 360 aacctgcgga aactgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 420 aggatgtatg getgegacet ggggcccgae gggcgcctcc teegegggta taaccagtte 480 gcctacgacg gcaaggatta catcgccctg aatgaggacc tgcgctcctg gaccgccgcg gacaaggegg etcagateae ecagegeaag tgggaggegg ecegtgagge ggageagegg agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 660 aagacgetge agegegegga ecceccaaag acacatgtga eccaccacce catetetgae 720 catgaggtca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca 840 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacgtgcc atgtgcagca cgaggggctg ccagagcccc tcaccctgag atgggggcca

•	•	
ctagctgt	gc ccaccatece categtggge ategttgetg geetggetgt cetggetgte 96 cce taggagetgt gatggetgtt gtgatgtgta ggaggaagag etcaggtgga ggga getgetetea ggetgegtee agcaacagtg eccagggete tgatgagtet ett gtaa	1020 1080 1094
<210><211><211><211><212><213>	49 546 DNA human leukocyte	
getteate egagtee aceggga tgegegg gegacet aggatta agateac	tic catgaggtat tictacaccy ccytyteccy geoegycege ggagagecee ige agtgggetae gtggaegaca egeagttegt geagttegae agegaegeeg aag agggggageeg eggegeegt gggtggagea ggaggggeeg gagtattggg gae acagaagtae aagegeeagg cacagaetga eegagtgaac etgeeggaaac eta etacaaccag agegaggeeg ggteteacae eetecagagg atgtatgget ggg geeegaeggg egeeteetee gegggtatga eeagteegee tacgaeggea eat egeeetgaat gaggaectge geteetggae egeegeggae aaggeggete eea gegeaagtgg gaggegeee gtgaggegga geageggaga geetaeetgg egtg egt	60 120 180 240 300 360 420 480 540 546
<210> <211> <212> <213>	50 546 DNA human leukocyte	
getteate egagtee aceggga tgegegg gegaegt aggatta agateae	ctc catgaggtat ttctacaccg ccgtgtcccg gcccggccgc ggagagcccc cgc agtgggctac gtggacgaca cgcagttcgt gcagttcgac agcgacgccg aag agggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg agac acagaagtac aagcgccagg cacagactga ccgagtgaac ctgcggaaac cta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtatggct ggg gcccgacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca cat cgccctgaat gaggacctgc gctcctggac cgccgcggac aaggcggctc cca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaag gcctacctgg cgtg cgt	60 120 180 240 300 360 420 480 540 546
<210> <211> <212> <213>	51 546 DNA human leukocyte	
getteate egagtee aceggga tgegegg gegacet aggatta agateae	ote catgaggtat tectacaceg cegtgteceg geceggeege ggagageece ege agtgggetae gtggacgaca egeagttegt geagttegae agegaegeeg aag agggggaeeg eggegeggt gggtggagea ggaggggeeg gagtattggg agac acagaagtae aagegeeagg cacagaetga eegagtgaae etgeggaaae eta etacaaceag agegaggeeg ggteteacae eetecagagg atgtatgget ggg gecegaegge egeeteetee gegggtataa eeagttegee tacgaeggea eat egeeetgaat gaggaeetge geteetggae egeegeggae aaggeggete eea gegeaagtgg gaggeggeee gtgaggegga geageggaga geetaeetgg egtg egt	60 120 · 180 240 300 360 420 480 540 546

<210> 52 <211> 1094 <212> DNA

<213> human leukocyte

<400>

60 atgcgggtca tggcgccccg aaccctcatc ctgctgctct cgggagccct ggccctgacc 120 cgcggagagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgcggttc 180 240 gacagcgacg ccgcgagtcc gagaggggag ccccgggcgc cgtgggtgga gcaggagggg 300 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg aacctgcgga aactgcgcgg ctactacaac cagagcgagg acgggtctca caccetccag 360 420 tggatgtatg gctgcgacct ggggcccgac gggcgcctcc tccgcgggta tgaccagtcc 480 gcctacgacg gcaaggatta catcgccetg aacgaggace tgcgcteetg gaeegeegeg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg 540 agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 600 gagacgctgc agcgcgcgga acacccaaag acacacgtga cccaccatcc cgtctctgac 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca 780 ggagatggaa cettecagaa gtgggeaget gtggtggtge ettetggaga agageagaga 840 tacacgtgcc atgtgcagca cgaggggctg ccagagcccc tcaccctgag atgggagcca 900 960 tetteccage ceaceatece categtggge ategttgetg geetggetgt eetggetgte ctagctgtcc taggagctgt gatggctgtt gtgatgtgta ggaggaagag ctcaggtgga 1020 aaaggaggga getgetetea ggetgegtee agcaacagtg eecagggete tgatgagtet 1080 ctcatcgctt gtaa 1094

<210> 53

<211> 546

<212> DNA

<213> human leukocyte

<400>

geteceacte catgaggtat ttetacaceg etgtgteeeg geeeggeege ggagageeee 60 getteatete agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 cgagtccgag aggggagccc cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcggaaac tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagtgg atgtatggct 300 gegacetggg geeegaeggg egeeteetee gegggtatga ceagteegee taegaeggea 360 420 aggattacat cgccetgaac gaggacetgc geteetggac cgccgcggac acggcggete agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

480 540 546

180

240

<210> 54

<211> 546

<212> DNA

<213> human leukocyte

<400> 54

geteceacte catgaggtat ttegacaceg cegtgteeeg geeeggeege ggagageeee getteatete agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccgag aggggagccc cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgaac ctgcggaaac tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagtgg atgtatggct gcgacctggg gcccgacggg cgcctcctcc gcgggtatga ccagtccgcc tacgacggca aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc agateaceca gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetacetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc

300

360 420 480

**54**0

gcgcgg	546
<210> 55 <211> 546 <212> DNA <213> human leukocyte	
<400> 55 geteceacte catgaggtat ttegacaceg cegtgteeeg geeeggeege ggagageeee getteatete agtgggetae gtggacgaca egeagttegt geagttegae agegaegeeg egagteeaag agggggeee egggeeegt gggtggagea ggagggeeg gagtattggg accgggagae acagaagtae aagegeeagg eacagaetga eegagtgaae etgeggaaae tgegeggeta etacaaceag agegaggaeg ggteteacae eetecagtgg atgtatgget gegacetggg geeegaeggg egeeteetee gegggtatga eeagteegee tacgaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeegeggae aeggeggee agateacea gegeaagtgg gaggeegee gtgaggegga geageggaa geetaeetgg aggaeegge egtgaggegga geageggaa geetaeetgg agggeaegtg egtggagtgg eteegaaa eeggeggaa gegeggaga geetaeetgg agggeaegtg egtggagtgg eteegaaa eegggaaggag aegetgeaggagaggeeggg	60 120 180 240 300 360 420 480 540 546
<210> 56 <211> 942 <212> DNA <213> human leukocyte	
c400> 56 geteceaete catgaggtat tegacaceg cegtgteceg geceggeege ggagageece getteatete agtgggetae gtggacgaca egeagttegt geggttegae agegaegeeg cgagteegag aggggageee eggeegeegt gggtggagea ggaggggeeg gagtattggg acegggagae acagaagtae aagegeeagg cacaggetga eegagtgaae etgeggaaae tgegeggeta etacaaceag agegaggaeg ggteteaeae eeteeagtgg atgtatgget gegacetggg gecegaeggg egeeteetee gegggtatga eeagteegee tacgaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeegeggae aeggeggete agateaeeea gegeaagtgg gaggeggeee gtgaggegga geageggaa aeggeggete agggeaegtg egtggagtgg eteegeagat aeetggagaa geageggag geeteetgg agggeaegtg egtggagtgg eteegeagat aeetggagaa egggaaggag aegetgeage gegeggaaea eeeaaagaea eaegtgaeee aeeateeegt etetgaeeat gaggeeaeee tgaggtgetg ggeeetggge ttetaeeetg eggagateae aetgaeetgg eagegggatg gegaggaeea aaeteaggae aeegagettg tggagaeeag gecageagga gatggaaeet teeagaagtg ggeagetgtg gtggtgeett etggagaaga geagagatae aegtgeeatg tgeageaega ggggetgeea gageeetee eeetgagatg ggageeatet teeeageeea ceateeeat egtgggeate gttgetggee tggetgteet ggetgteeta getgteetag gagetgtgat ggetgttgt atgtgtagga ggaagagee ag gagetgtgat ggetgttgt atgtgtagga ggaagageeag	60 120 180 240 300 360 420 480 540 600 660 720 780 840 942
<210> 57 <211> 546 <212> DNA <213> human leukocyte	
<400> 57 geteceacte catgaggtat ttegacaceg cegtgteeeg geeeggeege ggagageeee getteatete agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egagteegag aggggagee egggegeegt gggtggagaa ggaggggeeg gagtattgggaeegggagae acaggagae acagagtae aagegeeagg cacaggetga eegagtgaae etgeggaaae tgegeggeta etacaaceag agegaggaeg ggteteacae eetecagtgg atgtatgget gegacetggg geeegaeggg egeeteetee gegggtatga ecagteegee tacgaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeegeggae aeggeggete agateaceag gegaagtagae gaggeggeeeggae aeggeggete agateaceag gegaagtagae gaggeggeeeggae aeggeggete	60 120 180 240 300 360 420 480

agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg

agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc

gcgcgg		546
<211> <212>	58 546 DNA human leukocyte	
getteater egagteeg acegggg tgegegge gegacetg aggattad agateace	te catgaggtat ttegacaceg cegtgteeeg geceggeege ggagageece te agtgggetae gtggacgaca egeagttegt geggttegae agegaegeeg gag aggggageee egggegeegt gggtggagea ggaggggeeg gagtattggg gae acagaagtae aagegeeagg cacaggetga eegagtgaae etgeggaaae eta etacaaceag agegaggaeg ggteteacae eetecagtgg atgtatgget gg gecegaeggg egeeteetee gegggtatga ecagteegee taegaeggea eat egeeetgaae gaggaeetge geteetggae egeegeggae aeggeggee eea egeecaagtgg gaggeggeee gtgaggegga geagtggaga geetaeetgg gtg egtggagtgg eteegeagat aeetggagaa egggaaggag get eeteegagae egggaaggag aegetgeage	60 120 180 240 300 360 420 480 540 546
<210> <211> <212> <213>	59 546 DNA human leukocyte	
getteate egagteeg aceggga tgegegge gegacetg aggatta agateace	te catgaggtat tegacaceg cegtgteceg geeeggeege ggagageece te agtgggetae gtggacgaca egeagttegt geggttegae agegaegeeg gag agggggagee egggegeegt gggtggagea ggaggggeeg gagtattggg gae acagaagtae aagegeeagg cacaggetga eegagtgaae etgeggaaae eta etacaaceag agegaggaeg ggteteacae eetecagtgg atgtatgget ggg geeegaeggg egeeteetee gegggtataa eeagttegee tacgaeggea eat egeeetgaae gaggaeetge geteetggae egeegggae aeggeggee eea egeeetgaae gaggeggeee gtgaggegga geagtggag geetaeetgg egtg egt	60 120 180 240 300 360 420 480 540 546
<210> <211> <212> <213>	60 1094 DNA human leukocyte	
gagacct cgcggag gacagcg ccggagt agcctgc aggatgt gcctacg gacaccg agagcct catgagg tggcaga	tea tggcgcccg agccetecte etgetgetet eggaggeet ggccetgace ggg cetgetcca etceatgagg tatttegaca eegeegtgte eeggeeegge ggg cetgetcat etcagtggge tacgtggacg acacgcagtt egtgeggtte gacg eegegagtee gagaggggag eegeggeege egtgggtgga geaggagggg att gggacegga gacacagaac tacaagegee aggcacagge tgacegagtg gga acetgeggg etaetacaac eagagegagg aegggtetea eaceteeag gat getgegaet ggggeeegae gggegeetee teegeggta tgacegagt ace geaggagtate eace geaggaete etcagaetee geageaggaete etcagaetee geageeteegae gggegeetee teegeggta tgacegege gegegeteegae geageaggae eegggeeteeteegae gacegeegeg etcagateae eagegeaag ttggaggeg eegtgegee gaacegegeg geageagetg etcagateae etgagggeaa gtggeteegae gatacetgga gaacegggaag eeggaggae aceeetagae geagegeegagaa eeceeaaag acacacgtga eecaceaeee eetetegae eeggaatgggaggae eagaeeeaggaaeeeggaeeeggaeeggaeeggaeeeggaeeggaeeeggaeeggaeeeggaeeeggaeeggaeeeggaeeggaeeeggae	60 120 180 240 300 360 420 480 540 600 660 720 780 840 900

tetteccage ceaceatece cateatggge ategttgetg geetggetgt eetggttgte 96 etagetgtee ttggagetgt ggteaceget atgatgtgta ggaggaagag eteaggtgga aaaggaggga getgetetea ggetgegtge ageaacagtg eecagggete tgatgagtet eteateactt gtaa	50 1020 1080 1094
<210> 61 <211> 1094 <212> DNA <213> human leukocyte	
cgcggagagc cccgcttcat ctcagtggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagtcc gagaggggag ccgcgggcgc cgtgggtga gcaggagggg ccggagtatt gggaccggga gacacagaac tacaagcgcc aggcacaggc tgaccgagtg agcctgcgga acctgcggg etactacaac cagaggggg acgggtcta caccctccag aggatgtatg gctgcgact ggggcccgac gggcgcctcc tccgcgggta tgaccagtcc gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccacgcg gacaccgcgg ctcagatcac ccagcgcaag ttggaggcgg cccgtgcggc ggagcagctg agagcctacc tggagggcac gtgcgtgaag tggctccga gatacctgga gaacgggaag gagacgctgc agcgcgcaga acccccaaag acacacgtga cccaccaccc cctctctgac catgaggca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcgg atggggaga ccagacccag gacaccgaga ttgtggagac catgcagca ggagatggaa ccttccagaa gtgggcagct gtggtggtgc cttctggaca agagccagca ggagatggaa ccttccagaa gtgggcagct gtggtggtgc cttctggaca agagcagaga tacacgtgcc atatgcagca cgaggggctg caagagccc tcaccctgag ctgggagcca tcttccagc ctaccatccc catcatggc atcgttgctg gcctggctgt cctggttgtc 966 ctagctgtcc ttggagctgt ggtcaccgct atgatgtgta ggaggaagag ctcaggtgga	60 120 180 240 300 360 420 480 540 600 660 720 780 840 900 0 1020 1080 1094
<210> 62 <211> 1094 <212> DNA <213> human leukocyte	
gagacetgg cetgetecca etceatgagg tatttegaca eegeegtee eegeggagage ceegetteat etcagtgge tacgtggacg acaegcagtt egtgeggtee gacagegagge eeggagtee gagaggggag eeggagee egtgggtgga geaggagggg eeggagtatt gggaceggg eacaegagag tacaagegee aggeegga aceegeggg etactacaac eagagegagg aeggetee aggeetee gaeegggga aceegeggg etactacaac eagagegagg aeggetee eaceecteeag aggatgtetg getgegaeet gggeeegae gggegeetee teegegggta tgaceagtee geetacgaeg geaaggatta eategeeetg aaegaggaee teeggegggaaeeeggg gaeacegegg etcagateae eeagegaag ttggaggegg eeegtgegge ggageagetg agageetee teggagggaae gtgegtggag tggeteega gatacetgga gaaegggaag gagaeetee tggagggaae gtgegtggag tggeteegea gatacetgga gaaegggaag gagaeetee agegeegaga aceeceaaag acaeacgtga eeacaeacee eetetetgae eatgaggeea eeetgaggtg etggeeetg ggettetaee etgeggagat eacaetgaee tggeagegg atggggagga eagaeeegg gagaatggaa eetteeagaa gtgggeaget gtggtggtge ettetggaga eagaeeggagaa eacaegtgee atatgeagaa egagggeege eagaggeege eagaggeee eacaeeacee eateaggge atggggagee eagaggeege eagaggeee eacaeeacee ateggeege ategttgetg geetggetgt eetggttgte etggtggagea etetteeeage eacaeeacee eacaeeacee ateggegaatggaagagagagagagagagagagagagaga	60 20 180 240 300 360 420 480 540 600 660 720 780 840 900 0

aaaggaggga getgetetea ggetgegtge ageaacagtg cecagggete tgatgagtet

ctcatcactt gtaa

1080

```
<210> 63
<211> 1022
<212> DNA
<213> human leukocyte
```

<400> 63

60 tgctcccact ccatgaggta tttcgacacc gccgtgtccc ggcccggcgc cggagagccc 120 cgetteatet eagtgggeta egtggaegae aegeagtteg tgeggttega eagegaegee 180 gcgagtccga gaggggagcc gcgggcgccg tgggtggagc aggaggggcc ggagtattgg gaccgggaga cacagaagta caagcgccag gcacaggctg accgagtgag cctgcggaac 240 300 ctgcgcggct actacaacca gagcgaggac gggtctcaca ccctccagag gatgtctggc 360 tgcgacctgg ggcccgacgg gcgcctcctc cgcgggtatg accagtccgc ctacgacggc 420 aaggattaca tegeeetgaa egaggaeetg egeteetgga eegeggegga eacegegget cagatcacce agegeaagtg ggaggeggee egtgeggegg ageagetgag agectacetg 480 540 gagggactgt gcgtggagtg gctccgcaga tacctggaga acgggaagga gacgctgcag 600 egegeagaac ecceaaagac acaegtgace caccaecec tetetgacca tgaggecace 660 ctgaggtgct gggccctggg cttctaccct gcggagatca cactgacctg gcagcgggat ggggaggacc agacccagga caccgagctt gtggagacca ggccagcagg agatggaacc 720 780 ttccagaagt gggcagctgt ggtggtgcct tctggacaag agcagagata cacgtgccat atgcagcacg aggggctgca agagcccctc accetgaget gggagccatc ttcccagece 840 900 accatececa teatgggeat egttgetgge etggetgtee tggttgteet agetgteett ggagetgtgg teacegetat gatgtgtagg aggaagaget caggtggaaa aggagggage 960 1020 tgctctcagg ctgcgtgcag caacagtgcc cagggctctg atgagtctct catcacttgt 1022 ลล

```
<210> 64
<211> 1094
<212> DNA
<213> human leukocyte
```

<400> 64

60 atgcgggtca tggcgccccg agccctcctc ctgctgctct cgggaggcct ggccctgacc 120 gagacetggg cetgetecea etceatgagg tatttegaca eegeegtgte eeggeeegge 180 cgcggagagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgcggttc 240 gacagegacg cegegagtee gagaggggag ceeegggege egtgggtgga geaggagggg 300 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg 360 agcetgegga acetgegegg etactacaac cagagegagg acgggtetea cacettecag 420 aggatgtatg getgegacet ggggecegae gggegeetee teegegggta tgaceagtte 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgcgcteetg gaccgccgcg 540 gacaccgcgg ctcagatcac ccagcgcaag ttggaggcgg cccgtgcggc ggagcaggac agagcctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 600 660 aagacgetge agegegegga acceecaaag acacaegtga eccaecacee eetetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggggagga ccagacccag gacaccgagc ttgtggagac caggccagca ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaca agagcagaga 840 900 tacacgtgcc atatgcagca cgaggggctg caagagcccc tcaccctgag ctgggagcca tetteccage ceaceatece cateatggge ategttgetg geetggetgt cetggttgte 1020 ctagctgtcc ttggagctgt ggtcaccgct atgatgtgta ggaggaagag ctcaggtgga 1080 aaaggaggga getgetetea ggetgegtge agcaacagtg eecagggete tgatgagtet 1094 ctcatcactt gtaa

<210> 65 <211> 1094 <212> DNA

<213> human leukocyte

<400> 65

gagacctggg cctgctccca ctccatgagg tatttcgaca ccgccgtgtc ccggcccggc	120
cgcggagagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgcggttc	180
gacagcgacg ccgcgagtcc gagaggggag ccccgggcgc cgtgggtgga gcaggagggg	240
ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg	300
agcctgcgga acctgcgcgg ctactataac cagagcgagg acgggtctca caccttccag	360
aggatgtatg getgegacet ggggecegae gggegeetee teegegggta tgaceagtte	420
geetacgacg geaaggatta categeeetg aacgaggace tgegeteetg gacegeegeg	480
gacaccgcgg ctcagatcac ccagcgcaag ttggaggcgg cccgtgcggc ggagcaggac	<b>54</b> 0
agagectace tggagggeae gtgcgtggag tggeteegea gatacetgga gaacegggaag	600
aagacgetge agegegegga acceecaaag acacacgtga eccaceacee cetetetgae	660
catgaggeca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggggagga ccagacccag gacaccgagc ttgtggagac caggccagca	
ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaca agagcagaga	840
tacacgtgcc atatgcagca cgaggggctg caagagcccc tcaccctgag ctgggagcca	900
action of the control	60
ctagetgtee ttggagetgt ggteaceget atgatgtgta ggaggaagag etcaggtgga	1020
aaaggaggga getgetetea ggetgegtge agcaacagtg eccagggete tgatgagtet	1080
ctcatcactt gtaa	1094

<210> 66

<211> 546 <212> DNA

<213> human leukocyte

<400> 66

60 geteceacte catgaggtat ttegacaceg cegtgteeeg geceggeege ggagageece 120 getteatete agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgagc ctgcggaacc 300 tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagaat atgtatggct 360 gegacetggg geeegaeggg egeeteetee gegggtatga ceagteegee tacgaeggea 420 aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac accgcggctc 480 agateaecea gegeaagttg gaggeggeee gtgeggegga geagetgaga geetaeetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc **540** gcgcag

180 240

546

240

300

360

540

600

780

840

900

<210> 67

<211> 1094

<212> DNA

<213> human leukocyte

### <400>

60 atgegggtea tggegeeeg ageceteete etgetgetet egggaggeet ggeeetgaee 120 gagacetggg cetgetecea etceatgagg tatttegaca eegeeggte eeggeeegge 180 cgcggagage cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagtcc gagaggggag ccgcgggcgc cgtgggtgga gcaggagggg ccggagtatt gggaccggga gacacagaac tacaagcgcc aggcacaggc tgaccgagtg agectgegga acetgegegg etactacaac cagagegagg acgggtetea caccetecag aggatgtatg getgegacet ggggecegae gggegeetee teegegggta tgaceagtee 420 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgcgcteetg gacegeegeg gacaccgcgg ctcagatcac ccagcgcaag ttggaggcgg cccgtgcggc ggagcagctg agagectace tggagggeae gtgcgtggag tggctccgca gatacetgga gaacgggaag 660 gagacgetge agegegeaga acceecaaag acacaegtga eccaecaece cetetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggggagga ccagacccag gacaccgagc ttgtggagac caggccagca ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaca agagcagaga tacacgtgcc atatgcagca cgaggggctg caagagcccc tcaccctgag ctgggagcca 960 tetteccage ceaceatece cateatggge ategttgetg geetggetgt cetggttgte

480

540 546

ctagetgtee ttggagetgt ggteaceget aagatgtgta ggaggaagag etcaggtgga aaaggaggga getgetetea ggttgegtge agcaacagtg eccagggete tgatgagtet etcateactt gtaa	1020 1080 1094
<210> 68 <211> 546 <212> DNA <213> human leukocyte	
<400> 68 geteceaete catgaggtat ttegacaceg cegtgteceg geceggeege ggagageece getteatete agtgggetae gtggacgaca cgcagttegt geggttegae agegaegeeg egagteega aggggagee egagteega ggaggggeeg gagtattggg acegggagae acagaactae aagegeeagg cacaggetga eegagtgaac etgeggaaac tgegeggeta etacaaceag agegaggeeg ggteteaeae eetecagagg atgtatgget gegacetggg gecetaetee gegggtatga ecagteegee tacgaeggea aggattacat egeetgaae gaggaeetge geteetggae egeegeggae acegeggea aggattacat egeetgaae gaggaeetge gteetggae gegeggae acegeggete agateaeeca gegeaagttg gaggeggeee gtgeggegga geagetgaga geetaeetgg agggeaegtg egtggagtgg eteegeagat acetggagaa egggaaggag acgetgeage gegeagg	60 120 180 240 300 360 420 480 540 546
<210> 69 <211> 546 <212> DNA <213> human leukocyte	·
<400> 69 geteceacte catgaggtat ttegacaceg cegtgteeeg geceggeege ggagageeee getteatete agtgggetae gtggacgaca egcagttegt geggttegae agegacgeeg egagteega aggggagee egggegeegt gggtggagea ggaggggeeg gagtattggg acegggagae acagaagtae aagegeeagg cacaggetga eegagtgage etgeggaace tgegeggeta etacaaceag agegaggaeg ggteteacac eetecagagg atgtttgget gegacetggg gecegacggg egeeteetee gegggtatga ecagteege tacgaeggea aggattacat egeetgaac gaggaeetge geteetggae egeeteetgae agateacea gegeaagttg gaggegeee gtgeggegga geagetgaga geetaeetgg agggeaegtg egtggagtgg eteegeagat acetggagaa egggaaggag acgetgeage gegeag	60 120 180 240 300 360 420 480 540 546
<210> 70 <211> 546 <212> DNA <213> human leukocyte	
<400> 70 geteceaete catgaggtat ttegacaceg eegtgteeeg geeeggeege ggagageeee getteatete agtgggetae gtggaegaca egcagttegt geggttegae agegaegeeg egagteegag agggggeeg egggegeegt gggtggagea ggaggggeeg gagtattggg acegggagae acagaactae aagegeeagg eacaggetga eegagtgaae etgeggaaae tgegeggeta etacaaceag agegaggaeg ggteteaeae eetecagagg atgtatgget gegacetggg geeegaeggg egceteetee gegggtatga eeagteege tacgaeggea aggatacat eggeggeegeegeegeggeegeegeegeegeegeegeeg	60 120 180 240 300 360 420

aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac accgcggctc agatcaccca gcgcaagttg gaggcggccc gtgcggcgga gcagctgaga gcctacctgg

agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc

gcgcag

360

420

480

**540** 

180

240

480 540

546

546

180

240 300

<211> 546 <212> DNA

<213> human leukocyte

### <400> 71

geteceacte catgaggtat ttegacaceg cegtgteeeg geceggeege ggagageece getteatete agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgagc ctgcggaacc tgcgcggcta ctacaaccag agcgaggacg ggtctcacat catccagagg atgtctggct gegacetggg geeegaeggg egeeteetee gegggtatga ceagteegee tacgaeggea aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac accgcggctc agatcaccca gegeaagttg gaggeggeee gtgeggegga geagetgaga geetaeetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcag

<210> 72 <211> 1094 <212> DNA

<213> human leukocyte

#### <400> 72

60 atgegggtea tggegeeeeg ageceteete etgetgetet egggaggeet ggeeetgace 120 180 cgcggagagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgcggttc 240 gacagogacg cogogagtoc gagaggggag cocogggogo ogtgggtgga goaggagggg 300 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg 360 agectgegga acetgegegg etactacaac cagagegagg aegggtetea cacettecag 420 aggatgtatg getgegaeet ggggeeegae gggegeetee teegegggta tgaccagtte 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgcgctcetg gaccgccgcg 540 gacaccgcgg ctcagatcac ccagcgcaag ttggaggcgg cccgtgcggc ggagcaggac 600 agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 660 aagacgctgc agcgcgcgga acccccaaag acacacgtga cccaccaccc cctctctgac 720 catgaggeca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggggggga ccagacccag gacaccgagc ttgtggagac caggccagca 780 840 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaca agagcagaga 900 tacacgtgcc atatgcagca cgaggggctg caagagcccc tcaccctgag ctgggagcca 960 tetteccage ecaccatece cateatggge ategttgetg geetggetgt eetggttgte 1020 ctagetgtee ttggagetgt ggteaceget atgatgtgta ggaggaagag etcaggtgga 1080 aaaggagga getgetetea ggetgegtge ageaacagtg ceeagggete tgatgagtet 1094 ctcatcgctt gtaa

<210> 73 <211> 546 <212> DNA

<213> human leukocyte

## <400>

60 geteceacte catgaggtat ttegacaceg cegtgteeeg geeeggeege ggagageece 120 getteatete agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccgag aggggagccc cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgagc ctgcggaacc tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cttccagagg atgtatggct 300 360 gegacetggg geeegaeggg egeeteetee gegggtatga ceagttegee tacgaeggca 420 aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac accgcggctc agatcaccca gcgcaagtgg gaggcggccc gtgcggcgga gcaggacaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaagaag acgctgcagc gcgcgg

```
<210>
       74
<211>
        546
<212>
        DNA
<213>
        human leukocyte
<400> 74
geteceacte catgaggtat ttegacaceg cegtgteeeg geeeggeege ggagageece
                                                                    60
getteatete agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg
                                                                    120
                                                                       180
cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg
                                                                      240
accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgagc ctgcggaacc
                                                                    300
tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtctggct
                                                                    360
gcgacctggg gcccgacggg cgcctcctcc gcgggtatga ccagttcgcc tacgacggca
aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac accgcggctc
                                                                    420
agatcaccca gegeaagttg gaggeggece gtgeggegga geagetgaga geetacetgg
                                                                     480
                                                                      540
agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc
                                                                        546
gcgcag
<210>
        75
<211>
        546
<212>
        DNA
<213>
        human leukocyte
<40:0>
geteceacte catgaggtat ttegacaceg cegtgteeeg geeeggeege ggagageece
                                                                    60
                                                                    120
getteatete agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg
                                                                       180
cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg
                                                                      240
accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgagc ctgcggaacc
                                                                     300
tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtacggct
                                                                    360
gegacetggg geeegacggg egeeteetee gegggtatga ceagteegee tacgaeggea
                                                                    420
aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac accgcggctc
agatcaccca gcgcaagttg gaggcggccc gtgcggcgga gcagctgaga gcctacctgg
                                                                     480
                                                                      540
agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc
                                                                        546
gcacag
<210>
        76 ·
<211>
        546
<212>
        DNA
<213>
        human leukocyte
<400> 76
                                                                    60
gctcccactc catgaggtat ttcgacaccg ccgtgtcccg gcccggccgc ggagagcccc
                                                                    120
getteatete agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg
cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg
                                                                       180
                                                                       240
accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgagc ctgcggaacc
                                                                    300
tgcgcggcta ctacaaccag agcgaggacg ggtctcacac cctccagagg atgtctggct
                                                                    360
gcgacctggg gcccgacggg cgcctcctcc gcgggtatga ccagtccgcc tacgacggca
                                                                    420
aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac accgcggctc
                                                                     480
agatcaccca gcgcaagttg gaggcggccc gtgcggcgga gcagctgaga gcctacctgg
                                                                       540
agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc
                                                                        546
gcgcag
```

<210> 77 <211> 546 <212> DNA

<213> human leukocyte

<400> 77

gctcccactc catgaggtat ttcgacaccg ccgtgtcccg gcccggccgc ggagagcccc gcttcatctc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgccg cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg	60 120 180
accgggagac acagaactac aagcgccagg cacaggctga ccgagtgagc ctgcggaacc	240
tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtatggct	300
gcgacctggg gcccgacggg cgcctcctcc gcgggtatga ccagtccgcc tacgacggca	360
aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac accgcggctc	420
agatcaccca gcgcaagttg gaggcggccc gtgcggcgga gcagctgaga gcctacctgg	480
agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	<b>54</b> 0
gcgcag	546

<210> 78

<211> 822

<212> DNA

<213> human leukocyte

<400> 78

60 geteceaete eatgaggtat ttegacaeeg eegtgteeeg geeeggeege ggagageeee 120 getteatete agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccgag aggggagccg cgggcgccgt gggtggagca ggagggccg gagtattggg accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgagc ctgcggaacc 300 tgegeggeta etacaaccag agegaggaeg ggteteacae eeteeagagg atgtetgget 360 gegacetggg geeegaeggg egeeteetee gegggtatga eeagteegee tacgaeggea 420 aggattacat egecetgaac gaggacetge geteetggae egeegeggae acegeggete 480 agateaceea gegeaagtgg gaggeggee gtgeggegga geagetgaga geetacetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 600 gegeagaace cecaaagaca eaegtgaeee aceaeeeet etetgaeeat gaggeeaeee 660 tgaggtgetg ggccetggge ttetaccetg eggagateae actgacetgg cagegggatg gggaggacca gacccaggac accgagcttg tggagaccag gccagcagga gatggaacct 780 tccagaagtg ggcagctgtg gtggtgcctt ctggacaaga gcagagatac acgtgccata 822 tgcagcacga ggggctgcaa gagcccctca ccctgagctg gg

180

240

540

720

240

<210> 79

<211> 1094

<212> DNA

<213> human leukocyte

# <400>

60 atgegggtea tggegeeeg ageceteete etgetgetet egggaggeet ggeeetgaee 120 180 cgeggagage cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagegaeg cegegagtee gagaggggag eegegggege egtgggtgga geaggagggg 300 ccggagtatt gggaccggga gacacagaac tacaagcgcc aggcacaggc tgaccgagtg 360 agectgegga acctgegegg etactacaac cagagegagg aegggtetea caccetecag 420 aggatgtatg gctgcgacct ggggcccgac gggcgcctcc tccgcgggta tgaccagtcc 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgccgcg gacaccgcgg ctcagatcac ccagcgcaag ttggaggcgg cccgtgcggc ggagcagctg 540 600 agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 660 gagacgetge agegegeaga acceccaaag acacaegtga eccaecaece ectetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggggagga ccagacccag gacaccgagc ttgtggagac caggccagca 840 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaca agagcagaga tacacgtgcc atatgcagca cgaggggctg caagagcccc tcaccctgag ctgggagcca 900 tetteccage ceaceatece cateatggge ategttgetg geetggetgt eetggttgte 960 1020 ctagctgtcc ttggagctgt ggtcaccgct atgatgtgta ggaggaagag ctcaggtgga 1080 aaaggaggga getgetetea ggttgegtge agcaacagtg eecagggete tgatgagtet 1094 ctcatcactt gtaa

300 360

420

480

540

546

240 300

180

240

```
<210>
      80
       1094
<211>
<212>
       DNA
       human leukocyte
<213>
<400>
```

60 atgegggtea tggegeeceg aacceteate etgetgetet egggageect ggeectgace 120 gagacctggg cetgetecca etceatgagg tatttetaea eegeegtgte eeggeegge 180 cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcagttc gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg 240 300 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 360 agectgegga acetgegegg etactacaac cagagegagg cegggtetea caccetecag 420 aggatgtatg getgegacet ggggceegae gggegeetee teegegggta taaccagtte 480 gcctacgacg gcaaggatta catcgccetg aatgaggace tgcgctcetg gaccgccgcg 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtacggc ggagcagctg 600 agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 660 aagacgetge agegegegga acacceaaag acacaegtga eccaceatee egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacgtgcc atgtgcagca cgaggggctg ccagagcccc tcaccctgag atgggggcca 960 tetteceage ceaceatece categtggge ategttgetg geetggetgt cetggetgte 1020 ctagctgtcc taggagctgt gatggctgtt gtgatgtgta ggaggaagag ctcaggtgga 1080 aaaggaggga getgetetea ggetgegtee agcaacagtg eecagggete tgatgagtet 1094 ctcatcgctt gtaa

<210> 81 <211> 546 <212> DNA

<213> human leukocyte

<400> 81

60 geteceacte catgaggtat ttetacaceg cegtgteeeg geeeggeege ggagageeee getteatege agtgggetae gtggaegaea egeagttegt geagttegae agegaegeeg cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacagactga ccgagtgagc ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct gegacetggg geeegaeggg egeeteetee gegggtataa eeagttegee tacgaeggea aggattacat cgccctgaat gaggacctgc gctcctggac cgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtacggcgga gcagctgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaagaag acgctgcagc gcgcgg

<210> 82 <211> 1094 <212> DNA

<213> human leukocyte

<400>

atgcgggtea tggcgccccg aacceteate etgetgetet egggagecet ggccetgace 60 120 gagacetggg cetgetecca etceatgagg tatttetaca eegeegtgte eeggeeegge 180 cgcggagage cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcagttc gacagegacg cegegagtee aagaggggag cegegggege egtgggtgga geaggagggg ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 360 agcetgegga acetgegegg etactacaac cagagegagg cegggtetea caccetecag 420 aggatgtatg getgegacet ggggeeegae gggegeetee teegegggta taaccagtte gcctacgacg gcaaggatta categeeetg aatgaggace tgegeteetg gacegeegeg 480

gacaaggegg etcagateae ecagegeaag tgggaggegg ecegtgagge ggageagegg	<b>54</b> 0
agagectace tggagggeae gtgcgtggag tggetcegea gatacetgga gaaegggaag	600
aagacgetge agegegegga acacecaaag acacacgtga eccaceatee egtetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca	780
ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacgtgcc atgtgcagca cgaggggctg ccagagcccc tcaccctgag atgggggcca	900
tetteccage ceaecatece categtggge ategttgetg geetggetgt eetggetgte 96	60
ctagctgtcc taggagctgt gatggctgtt gtgatgtgta ggaggaagag ctcaggtgga	1020
aaaggaggga getgetetea ggetgegtee agcaacagtg eecagggete tgatgagtet	1080
ctcatcgctt gtaa	1094

<210> 83 <211> 1094 <212> DNA <213> human leukocyte

<400> 83

60 atgcgggtca tggcgcccg aaccetcate etgetgetet egggagecet ggccetgace gagacetggg cetgetecea etceatgagg tatttetaca eegeegtgte eeggeeegge 120 180 cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcagttc 240 gacagegaeg cegegagtee aagaggggag cegegggege egtgggtgga geaggagggg 300 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 360 agcctgegga acctgegegg ctactacaac cagagegagg cegggtetea caccetecag 420 aggatgtatg getgegacet ggggecegae gggegeetee teegegggta taaceagtte 480 gcctacgacg gcaaggatta catcgccctg aatgaggacc tgcgctcctg gaccgccgcg 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtacggc ggagcagctg 600 agagectace tggagggeae gtgcgtggag tggctccgca gatacetgga gaacaggaag 660 aagacgetge agegegegga acacceaaag acacacgtga eccaccatee egtetetgae  $catgaggcca\ ccctgaggtg\ ctgggccctg\ ggcttctacc\ ctgcggagat\ cacactgacc$ 720 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacgtgcc atgtgcagca cgaggggctg ccagagcccc tcaccctgag atgggggcca 960  $tetteccage\ ccaecatece\ categtggge\ ategttgetg\ gcetggetgt\ cctggetgtc$ 1020 ctagctgtcc taggagctgt gatggctgtt gtgatgtgta ggaggaagag ctcaggtgga 1080 aaaggagga getgetetea ggetgegtee ageaacagtg eecagggete tgatgagtet 1094 ctcatcgctt gtaa

<210> 84 <211> 546 **DNA** <213> human leukocyte

<400> 84

60 geteceacte catgaggtat ttetacaceg cegtgteeeg geceggeege ggagageece 120 getteatege agtgggetae gtggaegaea egeagttegt geagttegae agegaegeeg 180 cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg 240 accgggagac acagaagtac aagcgccagg cacagactga ccgagtgagc ctgcggaacc 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtatggct 360 gcgacctggg gcccgacggg cgcctcctcc gcgggtataa ccagttcgcc tacgacggca 420 aggattacat cgccctgaat gaggacctgc gctcctggac cgccgcggac aaggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg 480 540 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaagaag acgctgcagc gcgcgg

546

<210> 85 <211> 546 <212> DNA

<213> human leukocyte

<400> 85

geteceacte catgaggtat ttetacaceg cegtgteceg geceggeege ggagageece 60 getteatege agtgggetae gtggaegaea egeagttegt geagttegae agegaegeeg 120 cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg 180 accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgagc ctgcggaacc 240 tgegeggeta etacaaceag agegaggeeg ggteteacae cetecagagg atgtatgget 300 gegacetggg geeegaeggg egeeteetee gegggtataa eeagttegee tacgaeggea 360 aggattacat cgccctgaat gaggacctgc getcctggac cgccgcggac aaggcggctc 420 agateaccea gegeaagtgg gaggeggeec gtgaggegga geageggaga geetacetgg . 480 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaagaag acgctgcagc 540 gcgcgg 546

<210> 86

<211> 546

<212> DNA

<213> human leukocyte

<400> 86

540 546

60

120

300

360

420

60

120

300

360

420

480

180

240

480

180

240

<210> 87

<211> 546

<212> DNA

<213> human leukocyte

<400> 87

geteceaete catgaggtat tetacaceg eegtgteeeg geeeggeege ggagageeee getteatege agtgggetae gtggacgaca egeagttegt geagttegae agegaegeeg egagteeaag agggggageeg egggegeegt gggtggagea ggaggggeeg gagtattggg acegggagae acagaagtae aagegeeagg eacagaetga eegagtgage etgeggaaee tgegeggeta etacaaceag agegaggeeg ggteteacae eetecagagg atgtatgget gegacetggg geeegaeggg egeeteetee gegggtataa eeagttegee tacgaeggea aggattacat egeeetgaat gaggaeetge geteetggae egeegeggae aaggeggete agateaeeea gegeaagttg gaggeggeee gtgaggegga geageggaga geetaeetgg agggeaegtg egtggagtgg eteegeagat aeetggagaa egggaagaagaagaagaegeggeggegg

540 546

<210> 88

<211> 546

<212> DNA

<213> human leukocyte

<400> 88

geteceacte catgaggtat ttetacaceg cegtgteeeg geeeggeege ggagageeee getteatege agtgggetae gtggaegaea egeagttegt geagttegae agegaegeeg

<210> 89

<211> 687

<212> DNA

<213> human leukocyte

<400>

atgegggtea tggegeceeg aacceteace etgetgetet egggageeet ggeeetgace 60 120 gagacetggg cetgetecca etceatgagg tatttetaca eegeegtgte eeggeeegge cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcagttc gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag aggatgtatg getgegaeet ggggeeegae gggegeetee teegegggta tgaceagtee gcctacgacg gcaaggatta categeeetg aatgaggace tgegeteetg gacegeegeg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtacggc ggagcagctg agagcetace tggagggcae gtgcgtggag tggeteegca gatacetgga gaacggggag aagacgetge agegegegga acacceaaag acacaegtga eccaecatee egtetetgae catgaggcca ccctgaggtg ctgggcc

180

420

480

540

600

240

300

540 600

780

840 900

1094

660

660 687

240

300 360

<210> 90

<211> 1094

<212> DNA

<213> human leukocyte

<400> 90

60 atgegggtea tggegeeeg aacceteate etgetgetet egggageeet ggeeetgace gagacetggg cetgetecea etceatgagg tatttetaca eegeegtgte eeggeeegge 120 cgcggagage cccgetteat cgcagtggge tacgtggacg acaegcagtt cgtgeggtte 180 gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg 360 agectgegga acctgegegg etactacaac cagagegagg eegggtetea caccetecag 420  $aggatgtacg\ gctgcgacct\ ggggcccgac\ gggcgcctcc\ tccgcgggta\ tgaccagtcc$ 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgcgcteetg gaccgctgcg gacacggegg etcagateae ecagegeaag tgggaggegg ecegtgagge ggageagtgg agagcetace tggagggeae gtgcgtggag tggctccgca gatacetgga gaacgggaag gagacgctgc agcgcgcgga acacccaaag acacacgtga cccaccatcc cgtctctgac 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcageggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagcca tetteccage ceaceatece categtggge ategttgetg geetggetgt eetggetgte 960 1020 ctagctgtcc taggagctgt gatggctgtt gtgatgtgta ggaggaagag ctcaggtgga 1080 aaaggaggga getgetetea ggetgegtee agcaacagtg eecagggete tgatgagtet ctcatcgctt gtaa

<210> 91

<211> 1094

<212> DNA

300

420

180

360

480

540

600

660

240 300

180

240

480

540

546

#### human leukocyte <213>

<400> 91	
atgegggtea tggegeeeeg aacceteate etgetgetet egggageeet ggeeetgace	60
	120
cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc	180
gacagegacg cegegagtee aagaggggag cegegggege egtgggtgga geaggagggg	240
ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg	300
agectgegga acetgegegg etactacaae eagagegagg eegggtetea eaceeteeag	360
aggatgtacg getgegacet ggggeeegac gggegeetee teegegggta tgaceagtee	420
gcctacgacg gcaaggatta categeeetg aacgaggace tgegeteetg gacegetgeg	480
gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg	540
agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag	600
gagacgetge agegegegga acacecaaag acacaegtga eccaceatee egtetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca	<b>7</b> 80
ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacgtgcc atgtgcagca cgaggggctg ccagagcccc tcaccctgag atgggagcca	900
	60
ctagctgtcc taggagctgt gatggctgtt gtgatgtgta ggaggaagag ctcaggtgga	1020
aaaggaggga getgetetea ggetgegtee ageaacagtg eecagggete tgatgagtet	1080
ctcatcgctt gtaa	1094

<210> 92 <211> 546

<212> DNA

<213> human leukocyte

## <400> 92

60 geteceacte catgaggtat ttetacaceg cegtgteceg geceggeege ggagageece getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgagc ctgcggaacc tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtatggct 360 gegacetggg geeegacggg egeeteetee gegggtatga eeagteegee taegacggea aggattacat cgccctgaac gaggacctgc gctcctggac cgctgcggac acggcggctc agatcaccca gegeaagtgg gaggeggeee gtgaggegga geagtggaga geetacetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 93

<211> 1094

<212> DNA

<213> human leukocyte

## <400> 93

60 atgcgggtca tggcgcccg aaccetcate etgetgetet egggageeet ggccetgace gagacetggg cetgetecca etceatgagg tatttetaca eegeegtgte eeggeeegge 120 cgeggagage cccgetteat egeagtggge taegtggaeg acaegeagtt egtgeggtte gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 420 tggatgtatg getgegacet ggggecegae gggegeetee teegegggta tgaceagtee geetacgacg geaaggatta categeeetg aacgaggace tgegeteetg gactgeegeg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg agagcctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag gagacgetge agegegegga acacecaaag acacaegtga eccaceatee egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc

240

480

540 546

240

300

540

600

681

240

300

660

360

tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca	780
ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agageagaga	840
tacacgtgcc atgtgcagca cgaggggctg ccagagcccc tcaccctgag atgggagcca	900
	960
ctagctgtcc taggagctgt gatggctgtt gtgatgtgta ggaggaagag ctcaggtgga	1020
aaaggagga getgetetea ggetgegtee agcaacagtg eccagggete tgatgagtet	1080
ctcatcgctt gtaa	1094

<210> 94 <211> 546

<212> DNA

<213> human leukocyte

<400> 94

60 geteceacte catgaggtat ttetacaceg cegtgteeeg geeeggeege ggagageeee 120 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgagc ctgcggaacc 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagtgg atgtatggct 360 gcgacctggg gcccgacggg cgcctcctcc gcgggtatga ccagtccgcc tacgacggca 420 aggattacat cgccctgaac gaggacctgc gctcctggac cgcggcggac acggcggctc agatcaccca gegeaagtgg gaggeggeee gtgaggegga geagtggaga geetacetgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 95

<211> 681

<212> DNA

<213> human leukocyte

<400> 95

60 atgegggtea tggegeeceg aacceteate etgetgetet egggageeet ggeeetgace 120 gagacetggg cetgetecea etceatgagg tatttetaca eegeegtgte eeggeeegge 180 cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagtcc gagaggggag ccgcggggcgc cgtgggtgga gcaggagggg ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg aacctgcgga aactgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 420 tggatgtatg getgegacet ggggecegae gggegeetee teegegggta tgaceagtee 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgcgcteetg gacegeegeg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg agagcctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag gagacgetge agegegega acacecaaag acacaegtga eccaecatee egtetetgae catgaggcca ccctgaggtg c

<210> 96

<211> 1094

<212>

<213> human leukocyte

<400>

atgegggtea tggegeeeeg aacceteate etgetgetet egggageeet ggeeetgace 60 120 180 cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg aacctgegga aactgegegg ctactacaac cagagegagg eegggtetea caccetecag 360 420 tggatgtatg gctgcgacct ggggcccgac gggcgcctcc tccgcgggta tgaccagtcc

<210> 97

<211> 1094

<212> DNA

<213> human leukocyte

<400> 97

60 atgegggtea tggegeeeeg aacceteate etgetgetet egggageeet ggeeetgace 120 gagacetggg cetgetecca etceatgagg tatttetaca eegeegtgte eeggeeegge cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 180 gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg 300 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 360 aacctgcgga aactgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 420 tggatgtatg getgegacet ggggecegae gggegeetee teegegggta tgaceagtee 480 gectacgacg geaaggatta categeeetg aacgaggace tgegeteetg gaetgeegeg 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg 600 agagectace tggagggeac gtgcgtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegeggga acacceaaag acacaegtga cecaccatee egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca 840 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacgtgcc atgtgcagca cgaggggctg ccagagcccc tcaccctgag atgggagcca 960 tetteccage ceaceatece categtggge ategttgetg geetggetgt eetggetgte 1020 ctagctgtcc taggagctgt gatggctgtt gtgatgtgta ggaggaagag ctcaggtgga 1080 aaaggaggga getgetetea ggetgegtee ageaacagtg eecagggete tgatgagtet 1094 ctcatcgctt gtaa

<210> 98

<211> 546

<212> DNA

<213> human leukocyte

<400> 98

60 geteceaete catgaggtat ttetacaeeg eegtgteeeg geeeggeege ggagageeee 120 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgagc ctgcggaacc 300 tgegeggeta etacaaccag agegaggeeg ggteteacae cetecagtgg atgtatgget 360 gegacetggg geeegaeggg egeeteetee gegggtatga eeagteegee tacgaegtea  ${\tt aggattacat\ cgccctgaac\ gaggacctgc\ gctcctggac\ tgccgcggac\ acggcggctc}$ 420 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

480

180

546

240

240

300

540

600

546 <211> <212> DNA

<213> human leukocyte

<400>

60 geteceacte catgaggtat ttetacaceg cegtgteeeg geeeggeege ggagageece 120 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg 240 accgggagac acagaagtac aagcgccagg cacaggctga ccgagtgggc ctgcggaacc 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagtgg atgtatggct gegaeetggg geeegaeggg egeeteetee gegggtatga eeagteegee taegaeggea 360 420 aggattacat cgccctgaac gaggacctgc gctcctggac tgccgcggac acggcggctc agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagtggaga gcctacctgg 480 **540** agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 100 <211> 1094

<212> DNA

<213> human leukocyte

<400> 100

60 atgcgggtca tggcgcccg aaccetcate etgetgetet egggageeet ggccetgace 120 180 cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg 300 ccggagtatt gggaccggga gacacagaac tacaagcgcc aggcacaggc tgaccgagtg 360 agcetgegga acetgegegg etactacaac cagagegagg cegggtetea caccetecag 420 aggatgtacg getgegacet ggggecegae gggegeetee teegegggta tgaceagtee 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgctgcg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagtgg 540 600 agagectace tggagggeae gtgcgtggag tggctccgca gatacetgga gaacgggaag 660 gagacgetge agegegegga acacecaaag acacacgtga eccaceatee egtetetgae catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca 780 840 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacgtgcc atgtgcagca cgaggggctg ccagagcccc tcaccctgag atgggagcca tetteccage ceaceatece categtggge ategttgetg geetggetgt cetggetgte 960 1020 ctagetgtee taggagetgt gatggetgtt gtgatgtgta ggaggaagag etcaggtgga 1080 aaaggaggga getgetetea ggetgegtee agcaacagtg eccagggete tgatgagtet 1094 ctcatcgctt gtaa

<210> 101 <211> 1094

<212> DNA

<213> human leukocyte

<400>

60 atgcgggtca tggcgcccg aaccctcatc ctgctgctct cgggagccct ggccctgacc 120 180 cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagtcc gagaggggag ccgcgggcgc cgtgggtgga gcaggagggg ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 360 agectgegga acetgegegg etactacaac cagagegagg eegggtetea caccetecag 420 tggatgtttg gctgcgacct ggggcccgac gggcgcctcc tccgcgggta tgaccagtcc gcctacgacg gcaaggatta categeeetg aacgaggate tgcgeteetg gaccgccgcg 480 gacaeggegg etcagateae ceagegeaag tgggaggegg eeegtgagge ggageagegg agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag

gagacgetge agegeggga acacecaaag acacaegtga eccaecatee egtetetgae catgaggeea ecetgaggtg etgggeeetg ggettetaee etgeggagat cacaetgaee	660 720
tggcagtggg atggggagga ccaaactcag gacaccgagc ttgtggagac caggccagca	780
ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagccg	900
tetteccage ceaceatece eategtggge ategttgetg geetggetgt cetggetgte 96	60
ctagctgtcc taggagctgt ggtggctgtt gtgatgtgta ggaggaagag ctcaggtgga	1020
aaaggaggga getgetetea ggetgegtee agcaacagtg eccagggete tgatgagtet	1080
eteategett gtaa	1094

<210> 102

<211> 546

<212> DNA

<213> human leukocyte

<400> 102

geteceacte catgaggtat ttetecacat cegtgteeg geceggeege ggggageece 60 getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg 120 cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg 180 accgggagac acagaagtac aagcgccagg cacagactga ccgagtgagc ctgcggaacc 240 tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagtgg atgtttggct 300 gegacetggg geeegaeggg egeeteetee gegggtatga eeagteegee taegaeggea 360 aggattacat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc 420 agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacctgg 480 agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc 540 gcgcgg 546

<210> 103

<211> 1094

<212> DNA

<213> human leukocyte

<400> 103

atgegggtea tggegeceeg aacceteate etgetgetet egggageeet ggeeetgace 60 gagacetggg cetgetecca etceatgagg tattteteca cateegtgte eeggeeegge 120 cgcggggagc cccacttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 180 gacagcgacg cegegagtee aagaggggag cegegggege egtgggtgga geaggagggg 240 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 300 agcetgegga acetgegegg etactacaac eagagegagg eegggtetea eaceeteeag 360 tggatgtttg getgegaeet ggggeeegae gggegeetee teegegggta tgaccagtee 420 gcctacgacg gcaaggatta categeeetg aacgaggate tgcgcteetg gaccgccgcg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagcgg **540** agagcetace tggagggcae gtgcgtggag tggeteegea gatacetgga gaacgggaag 600 gagacgctgc agcgcgcgga acacccaaag acacacgtga cccaccatcc cgtctctgac 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagtggg atggggagga ccaaactcag gacaccgagc ttgtggagac caggccagca 780 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagccg 900 tetteccage ceaceatece categtggge ategttgetg geetggetgt cetggetgte 960 ctagctgtcc taggagctgt ggtggctgtt gtgatgtgta ggaggaagag ctcaggtgga 1020 aaaggaggga getgetetea ggetgegtee agcaacagtg eecagggete tgatgagtet 1080 ctcatcgctt gtaa 1094

<210> 104

<211> 546

<212> DNA

<213> human leukocyte

<400> 104	
geteceaete catgaggtat ttetecacat cegtgteceg geceggeege ggggageece getteatege agtgggetae gtggaegaca egcagttegt geggttegae agegaegeeg egagteega aggggageeg egagteega gggtggagea ggaggggeeg gagtattggg acegggagae acagaagtae aagegeeagg cacaggetga eegagtgaae etgegggaaee tgegeggeta etacaaceag agegaggeeg ggteteaeae eetecagtg atgtttgget gegaeetggg gecegaeggg egeeteetee gegggtatga eeagteege aegaeggea aggattacat egeeetgaae gaggatetge geteetggae egeegeggae aeggeggete agateacea gegeaagtgg gaggeggee gtgaggegga geageggaa geetaeetgg aggecaegtg egtggagtgg eteegaat aeetggagaa egggaaggag aegetgeage gegegg	60 120 180 240 300 360 420 480 540 546
<210> 105	
<211> 546	
<212> DNA	
<213> human leukocyte	
<400> 105	
gctcccactc catgaggtat ttctccacat ccgtgtcccg gcccggccgc ggggagcccc	60
getteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg	120 180
cgagtccgag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagac acagaagtac aagcgccagg cacagactga ccgagtgagc ctgcggaacc	240
tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagtgg atgtatggct	300
gcgacctggg gcccgacggg cgcctcctcc gcgggtatga ccagtccgcc tacgacggca	360
aggattacat cgccctgaac gaggatctgc gctcctggac cgccgcggac acggcggctc	420
agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	480 540
<del></del>	010
gcgcgg	546
gcgcgg	546
	546
<210> 106 <211> 1094	546
<210> 106 <211> 1094 <212> DNA	546
<210> 106 <211> 1094	546
<210> 106 <211> 1094 <212> DNA <213> human leukocyte <400> 106	
<210> 106 <211> 1094 <212> DNA <213> human leukocyte <400> 106 atgcgggtca tggcgccccg aaccetcete etgetgetet egggagecet ggccetgace	60
<210> 106 <211> 1094 <212> DNA <213> human leukocyte  <400> 106 atgegggtea tggegeeceg aacceteete etgetgetet egggageeet ggeeetgaee gagacetggg eetgeteeca etceatgagg tatttetaea eegetgtgte eeggeeegge	60 120
<210> 106 <211> 1094 <212> DNA <213> human leukocyte  <400> 106 atgegggtea tggegeeceg aacceteete etgetgetet eggageeet ggeeetgaee gagacetggg eetgeteeca etceatgagg tatttetaea eegetgtge eegeggagage eegeggagage taggeggte taggegetee	60 120 180
<210> 106 <211> 1094 <212> DNA <213> human leukocyte  <400> 106 atgegggtea tggegeeceg aacceteete etgetgetet egggageeet ggeeetgaee gagacetggg eetgeteeca etceatgagg tatttetaea eegetgtgte eeggeeegge	60 120 180 g 240 300
<210> 106 <211> 1094 <212> DNA <213> human leukocyte <400> 106 atgcggtca tggcgccccg aaccetecte etgetgetet eggageeet ggccetgace gagacetggg cetgetecea etceatgagg tatttetaca ecgetgtge eegggagage ecgeggagage tacgtggge tacgtggacg acaegcagtt egtgegtte gacagegage eeggagtee aagaggggag eegegggege egtggtgga geaggaggge eeggagtatt gggacegga gacacagaac tacaagegee aggcacagae tgacegagtg aacetgegga aacetgeggg etactacaac eagagegagg eegggtetea eateatecag	60 120 180 g 240 300 360
<210> 106 <211> 1094 <212> DNA <213> human leukocyte <400> 106 atgcggtca tggcgccccg aaccetcetc etgetgetet eggageeet ggccetgace gagacetggg eetgeteca etccatgagg tatteetaca eegetgte eegeggagage eegeggagage eegegtggge tacgtggacg acacgcagt eggegtee gacagegacg eegeggtee aagaggggag eegegggege egtggtgga geaggaggge eeggagtet ggacaggag eeggggege eggggege eggggtggagge eeggggtet aacetgegga aacetgegga gacacagaac tacaagegee aggacagaa tgacegatg aacetgegga aacetgeggg etactacaac eagagegag eegggtetea eateateeag aggatgtatg getgegacet ggggeeegee ggggeeetee teegegggea tgaceagtta	60 120 180 3 240 300 360 420
<210> 106 <211> 1094 <212> DNA <213> human leukocyte <400> 106 atgeggtca tggegecceg aaccetecte etgetgetet eggagecet ggeeetgace gagacetggg eetgeteca etcatgagg tatteetaca eegetgte eegeggagage eegeggagage eegegtggge taegtggaeg acaegeagt eggegtee gacagegaeg eegegggge eagaggggg eegeggge eggggtee gacageggggggggggggggggggggggggggggggg	60 120 180 3 240 300 360 420 480
<210> 106 <211> 1094 <212> DNA <213> human leukocyte <400> 106 atgcgggtca tggcgcccg aaccetcetc ctgctgctct cgggagccet ggccctgacc gagacetggg cetgetcca etccatgagg tattectaca ccgetgtgc cegggagagc ccacettcat cgcagtggc tacgtggacg acacgcagt cgtgcggtc gacagcagcg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtga gcaggaggg ccggagtatt gggacegga gacacagaac tacaagcgc aggcacagat gaccgagtg aacctgcgga aactgcggg ctactacaac cagagcgag ccgggtetca catcatcag aggatgtatg gctgcgact ggggcccgac gggcgcctcc tccgcgggca tgaccagtta gcctacgacg gcaaggatta catcgcctg aacgaggac tgcgcgcgc gacacgcgg ctcagatca ccagcgcaag tgggaggcg cccgtgaggc ggagcagctg gacacgcgcg ctcagatca ccagcgcaag tgggaggcg cccgtgaggc ggagcagctg	60 120 180 3 240 300 360 420
<210> 106 <211> 1094 <212> DNA <213> human leukocyte <400> 106 atgegggtea tggegecceg aaccetecte etgetgetet egggagecet ggeeetgace gagacetggg eetgeteeca etceatgagg tattetaca eegetgtge eegggegee egggagage eccaetteat egeagtgge tacgtggaeg acacgcagtt egtgeggtte gacagegage eeggagtee aagagggag eeggggege eegggtgga geaggaggge eeggagtatt gggacegga gacacagaac tacaagegee aggeeggagtee aacetgegga aacetgegga gacacagaac tacaagegee aggeetea eateatecag aggatgtatg getgegaet ggggeeegga egggegeetee teegegggea tgaccagtta geetacgagg gacaggagtata eategeeetg aacgaggageetee teegegggea tgaccagtta geetacgaegg eegggetee teegeteetg gacegeegg gacacggegg etcagatea eategeeetg gacagggggegeetee teegegggea tgaccagtta geetacgaegg etcagatea eategeeetg gacaegggg etcagateac ecagegeaag tgggaggegg eeggteete teggeegeggaagggggggggg	60 120 180 300 360 420 480 540 600 660
<210> 106 <211> 1094 <212> DNA <213> human leukocyte <400> 106 atgcggtca tggcgcccg aaccetcete etgetgetet eggageeet ggccetgace gagacetggg cetgeteeca etccatgagg tattetaca ecgetgtge eeggggagage ecgeggagee eggageet aacgegge eegggggge eegggggge eeggggggg eegggggg	60 120 180 300 360 420 480 540 600 660 720
<210> 106 <211> 1094 <212> DNA <213> human leukocyte <400> 106 atgcgggtca tggcgccccg aaccetcetc etgetgetet egggageeet ggccetgace gagacetggg cetgeteca etccatgagg tatteetaca ecgetgtgte eeggecegge egggagage eccaetteat egcagtggg taegtggaeg acaegeagt egtgeggtte gacagegage eegggagtee aagaggggag eeggggege egtgggtgga geaggaggg eegggatatt gggacegga gacaegaat taeaagegee aggcaeagat tgacegagtg aacetgegga aacetgegg etaetacaac eagagegagg eegggetetea eateateeag aggatgtatg getgegaeet ggggecegae gggegeetee teegegggea tgaceagtta geetaegaeg geaaggatta eategeeetg aacgaggaee teeggeeetee teegeggea tgaceagtta geetaegaeg eeggeetee teegeggeaetgaeegggaaegeegaaegeeggaaegaaeggaaeggaaeggaaeggaaeggaaeg	60 120 180 3 240 300 360 420 480 540 600 660 720 780
<210> 106 <211> 1094 <212> DNA <213> human leukocyte <400> 106 atgcgggtca tggcgcccg aaccetecte ctgctgctct cgggagccct ggccctgacc gagacctggg cctgctcca ctccatgagg tatttctaca ccgctgtgtc ccggccggc cgcggagagc ccacettcat cgcagtggg tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtggtgga gcaggagggg ccggagtatt gggaccggg gacacagaac tacaagcgcc aggcacagac tgaccgagtg aacctgcgga aactgcggg ctactacaac cagagcgagg ccgggtcta catcatccag aggatgtatg gctgcgact ggggcccga gggcgcctcc tccgcgggca tgaccagtta gcctacgacg gcaaggatta catcgcctg aacgaggac tgcgctctg gaccgccgg gacacggcg ctcagatca ccagcgcag tgaccagtta gcctacgacg gcaaggatta catcgcctg aacgaggac tgcgctctg gaccgccgg gacacggcg ctcagatcac ccagcgcaag tgggaggcg cccgtgaggc ggagcagctg agagcctacc tggagggcac gtgctggag tggctccga gatacctgga gaacgggaag gagacgtcacctggaggcagaacaccaaag acacacgtga cccaccatcc cgtctctgac catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcgg atggcggaga ccaaactcag gacaccgagc ttgtggagac caggccagca ggagatggaa ccttccagaa gtgggcagct gtggtgtgtc cttctggaga agagcagaagagaag	60 120 180 3 240 300 360 420 480 540 600 660 720 780 840
<210> 106 <211> 1094 <212> DNA <213> human leukocyte <400> 106 atgeggtca tggegeccg aaccetecte etgetgetet eggageeet ggeeetgace gagacetggg eetgeteea etceatgagg tattetaca eegetgtgte eeggeggee eggagage eeggagtee aagaggggg taegtggag acaeggagt eggegtte gacagegage eeggagtee aagaggggag eegggtee eggagtet eggaggggg eegggtee eggagtatt gggacegga gacaeagaac tacaagege egggteta aactgegga gacaeagaac tacaagegee egggtetea eateateeag aggatgtatt getgegeg etaetacaac eagagegagg eegggtetea eateateeag aggatgtatt getgegaet ggggeeegae gggegeetee teegeggea tgaceagtta geetaegaeg etaegaeg egggeeetee teegeggea tgaceagtta geetaegaeg geaaggatta eategeeetg aacgaggaee tgegeteetg gacegeegg gacaeggeg eteagatea eetageeetg aacgaggaee eegggegeetgaggeeggaaggaggeetgaggaggeetge agageetge aggegegga acaeceaaag tgggaggegg eecgtgagge ggageagetg agageetge agegegegga acaeceaaag acaecegag eecaecatee egtetetgae eatgaggeea eectgaggtg etgggeeetg ggettetaee etggeggaat eacaetgaee tggeagegg atggeggga eegageaget ggettetaee etggeagaat eacaetgaee tggeagegg atggeggaga eeaaactaag gacaecegage ttgtggaga eeggeagea eggagatggaa eetteeagaa gtggeaget gtggtggtge ettetggaga agageagaa tacaetteeagaa gtggeaget gtggtgtgte ettetgagaa agageagaa tacaetteeagaa gtggagaee eggagetg eeggageee teaceetaee eggagaagaa agageagaa eetteeagaa gtggeaget gtggtgtgte ettetgagaa agageagaa tacaegtgee atgtgeagea eggagggetg eeggageee teaceetaeeeggagaatgaa eetteeagaa gtggeaget gegggeeee teaceetgaa agageagaa tacaegtgee atgtgeagea eggagggetg eeggageeee teaceetgaa agageagaa	60 120 180 3 240 300 360 420 480 540 600 660 720 780
<210> 106 <211> 1094 <212> DNA <213> human leukocyte <400> 106 atgeggtea tggegecceg aaccetecte etgetgetet eggageeet ggeeetgace gagacetggg etgetecca etcatgagg tatttetaca eegetgtgte eeggeegge eggagage eccaetteat egeagtggge taegtggaeg acaegeagt egtgeggtte gacagegaeg eegeggtee aaggagggg eeggagee eggaggee eggagtee aaggagggg eeggggee egtgggtggg gacaggagge eeggagtee aagaggggg eeggggee egtgggtgg gacaeggagge eeggaggee eggagegee eggaggege etaetacaae eagagegege egggeteta eateateeag aggatgtatt ggtgegggg etaetacaae eagagegagg eegggeteta eateateeag aggatgtatg getgegaet gggeeegae gggeeetee teegeggea tgaceagtta geetaegaeg geaaggatta eategeeetg aacgagggee eegggeetee tggeteetg gacegeegg gacaeggeg eteagateae eagegeag tgggagggee eeggageetee ggaeegeegg gaaegeetg gagageetge agggegeag tgggggag tggggagg eegggagggggggggg	60 120 180 3 240 300 360 420 480 540 600 660 720 780 840 900 60 1020
<210> 106 <211> 1094 <212> DNA <213> human leukocyte <400> 106 atgeggtca tggcgccccg aaccetcete etgetgetet eggageeet ggeeetgace gagacetggg eetgeteeca etceatgagg tatttetaca eegetgtge eeggeegge eggagage eegegggge taegtggag acacgagt eggeggte gacagegage eeggagtet aagaggggag eeggggege eggggtgga geaggaggge eeggagtatt gggacegga gacacagaac tacaagegee egtggtgga geaggaggg eeggagtatt gggacegga gacacagaac tacaagegee eggggtetea eateateeag aacetgegga aactgeggg etaetacaac eagagegagg eegggtetea eateateeag aggatgtat getgegacet ggggeeegae gggegeetee teegeggea tgaceagtta geetacgaeg geaaggatta eategeeetg aacgaggage eegggtetea eateateeag aggatgtat getgegaeet ggggeeetee teegeggge eeggeegg gacaeggeg etaagatac eeggeegg aacgagggge eegggggggeegg eegggggggggg	60 120 180 300 360 420 480 540 600 660 720 780 840 900 60

240

480

540 546

240

<211> 546 <212> DNA

human leukocyte <213>

<400> 107

60 geteceatte catgaggtat ttetacaceg etgtgteeeg geeeggeege ggagageece 120 acttcatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg accgggagae acagaactae aagcgecagg cacagaetga eegagtgaae etgeggaaae 300 tgcgcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct 360 gegacetggg geeegaeggg egeeteetee gegggeatga eeagttagee tacgaeggea 420 aggattacat egecetgaac gaggaeetge geteetggae egeegeggae aeggeggete agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc gcgcgg

<210> 108 <211> 1094

<212> **DNA** 

<213> human leukocyte

<400> 108

60 atgegggtea tggegeeeeg aacceteete etgetgetet egggageeet ggeeetgace 120 gagacetggg cetgetecca etceatgagg tatttetaca eegetgtgte eeggeeegge 180 cgcggagagc cccacttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagegacg cegegagtee aagaggggag cegegggege egtgggtgga geaggagggg 300 ccggagtatt gggaccggga gacacagaac tacaagcgcc aggcacaggc tgaccgagtg 360 aacetgegga aactgegegg etactacaac cagagegagg eegggtetea catcatecag 420 aggatgtatg getgegacet ggggeeegae gggegeetee teegegggea tgaceagtta 480 gcctacgacg gcaaggatta catcgccetg aacgaggace tgcgctcetg gaccgccgcg 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 600 agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga acacceaaag acacaegtga eccaceatee egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca 840 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagcca 900 960 tetteccage ceaceatece eategtggge ategttgetg geetggetgt eetggetgte 1020 ctagctgtcc taggagctgt gatggctgtt gtgatgtgta ggaggaagag ctcaggtgga 1080 aaaggagga getgetetea ggetgegtee agcaacagtg eecagggete tgatgagtet 1094 ctcatcgctt gtaa

<210> 109

<211> 1094

<212> DNA

<213> human leukocyte

<400>

60 atgcgggtca tggcgccccg aaccetecte etgetgetet egggageeet ggccetgace 120 180 cgcggagagc cccacttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 240 gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg 300 ccggagtatt gggaccggga gacacagaac tacaagcgcc aggcacagac tgaccgagtg 360 aacctgcgga aactgcgcgg ctactacaac cagagcgagg ccgggtctca catcatccag 420 aggatgtatg gctgcgacct ggggcccgac gggcgcctcc tccgcgggta tgaccagtcc 480 gcctacgacg gcaaggatta categeeetg aacgaggace tgcgeteetg gaccgccgcg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 540 agagcctacc tggagggcac gtgcgtggag tggctccgca gatacctgga gaacgggaag 600

gagacgetge agegegegga acacceaaag acacaegtga eccaecatee egtetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca	780
ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagcca	900
	60
ctagctgtcc taggagctgt gatggctgtt gtgatgtgta ggaggaagag ctcaggtgga	1020
aaaggaggga getgetetea ggetgegtee agcaacagtg eccagggete tgatgagtet	1080
ctcatcgctt gtaa	1094

<210> 110 <211> 1094 <212> DNA

<213> human leukocyte

<400>

atgegggtea tggegeeeeg aacteteete etgetgetet egggageeet ggeeetgaee 60 120 gagacetggg cetgetecca etceatgagg tatttetaca eegetgtgte eeggeeegge 180  $cgcggagagc\ cccacttcat\ cgcagtgggc\ tacgtggacg\ acacgcagtt\ cgtgcggttc$ 240 gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg ccggagtatt gggaccggga gacacagaac tacaagcgcc aggcacagac tgaccgagtg 300 360 aacctgcgga aactgcgcgg ctactacaac cagagcgagg ccgggtctca catcatccag 420 aggatgtatg getgegacet ggggecegae gggegeetee teegegggea tgaceagtte 480 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgccgcg 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 600 agagcetace tggagggeae gtgegtggag tggeteegea gatacetgga gaacgggaag 660 gagacgetge agegegegga acacecaaag acacaegtga eccaecatee egtetetgae catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagcca tetteccage ecaccatece categtggge ategttgetg geetggetgt eetggetgte 1020 ctagctgtcc taggagctgt gatggctgtt gtgatgtgta ggaggaagag ctcaggtgga aaaggaggga getgetetea ggetgegtee agcaacagtg eecagggete tgatgagtet 1080 1094 ctcatcgctt gtaa

<210> 111 <211> 1094 <212> DNA

<213> human leukocyte

<400> 111

60 atgcgggtca tggcgcccg aaccetecte etgetgetet egggageeet ggccetgace 120 180 cgcggagagc cccacttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagegacg cegegagtee aagaggggag cegegggege egtgggtgga geaggagggg 300 ccggagtatt gggaccggga gacacagaac tacaagcgcc aggcacagac tgaccgagtg 360 aacctgcgga aactgcgcgg ctactacaac cagagcgagg ccgggtctca catcatccag 420 aggatgtatg gctgcgacct gggggcccgac gggcgcctcc tccgcgggca tgaccagttc gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgccgcg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 540 600 agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 660 gagacgetge agegegegga acacecaaag acacaegtga eccaceatee egtetetgae catgaggeca ccctgaggtg ctgggecctg ggettetace ctgcggagat cacactgace 720 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca 840 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 900 tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagcca tetteccage ceaceatece categtggge ategttgetg geetggetgt eetggetgte 960

ctagctgtcc taggagctgt gatggctgtt gtgatgtgta ggaggaagag ctcaggtgga 1020 aaaggaggga getgetetea ggetgegtee ageaacagtg cecagggete tgatgagtet 1080 ctcategett gtaa 1094

<210> 112 <211> 1015

<212> DNA

<213> human leukocyte

### <400> 112

atgegggtea tggegeeeeg aacceteete etgetgetet egggageeet ggeeetgaee 60 120 cgcggagagc cccacttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 180 gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg 240 300 ccggagtatt gggaccggga gacacagaac tacaagcgcc aggcacagac tgaccgagtg 360 aacctgcgga aactgcgcgg ctactacaac cagagcgagg ccgggtctca catcatccag 420 aggatgtatg getgegacet ggggecegae gggegeetee teegegggea tgaceagtae gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgccgcg 480 gacacggcgg ctcagateac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg 540 600 agageetace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 660 gagacgetge agegegegga acacecaaag acacacgtga eccaceatee egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagcca 960 tetteccage ceaceatece categtggge ategttgetg geetggetgt cetggetgte ctagetgtee taggagetgt gatggetgtt gtgatgtgta ggaggaagag etcag 1015

<210> 113

<211> 546

<212> DNA

<213> human leukocyte

# <400> 113

geteceaete eatgaggtat tetacaeeg etgtgteeeg geeeggeege ggagageeee aetteatege agtgggetae gtggaegaea egeagttegt geggttegae agegaegeeg egagteeaag aggggageeg egggeegt gggtggagea ggaggggeeg gagtattggg acegggagae acagaactae aagegeeagg eacagaetga eegagtgage etgeggaaee tgegeggeta etacaaeeag agegaggeeg ggteteaeat eatecagagg atgtatgget gegaeetggg geeegaeggg egeeteetee gegggeatga ecagttagee taegaeggea aggattaeat egeeetgaae gaggaeetge geteetggae egeegggae aeggeggete agateaeeea gegeaagtgg gaggeggeee gtgaggegga geagetgag geetaeetgg agggeaegtg egtggagtgg eteegeagat aeetggagaa egggaaggag aegetgeage gegegg

60 120

> 180 240

300 360

420

480

540

180

240

546

<210> 114

<211> 546

<212> DNA

<213> human leukocyte

### <400> 114

geteceaete catgaggtat tetacaecg etgtgteeeg geeggeege ggagageece 60
actteatege agtgggetae gtggacgaea egeagttegt geggttegae agegaegeeg 120
egagteeaag aggggageeg egggeeget gggtggagea ggaggggeeg gagtattggg aceggggagae acagaactae aagegeeagg eacagaetga eegagtgaae etgeggaaae 22
egggegeta etacaaecag agegaggeeg ggteteaeat eateeagagg atgtatgget 300
eggaeetggg geeegaeggg egeeteetee gegggeatga eeagttagee tacgaeggea 360

agatcac	cat egecetgaae gaggaeetge geteetggae egeegeggae aeggeggete eea gegeaagtgg gaggeggeee gtgaggegga geageggaga geetaeetgg gtg egtggagtgg eteegeagat aeetggagaa egggaaggag aegetgeage	420 480 540 546
<210><211><211><212><213>	115 546 DNA human leukocyte	
acttcate cgagtec accggga tgcgcgg gcgacct aggatta agatcac	tte catgaggtat ttetacaceg etgtgteeeg geeeggeege ggagageeee ge agtgggetae gtggaegaca egeagttegt geggttegae agegaegeeg aag agggggageeg egggeeget gggtggagea ggaggggeeg gagtattggg gae acagaactae aagegeeagg eacagaetga eegagtgaae etgeeggaaae eta etacaaceag agegaggeeg ggteteacat eatecagagg atgtatgget ggg geeegaeggg egeeteetee gegggeatga eeagteegee taegaeggea eat egeeetgaae gaggaeetge geteetggae egeegeggae aeggeggete eea gegeaagtgg gaggeggeee gtgaggegga geagetgaga geetaeetgg egtg egt	60 120 180 240 300 360 420 480 540 546
gcttcatc cgagtcc accggga tgcgcgg gcgacct aggatta agatcac agggcac gcgcgg	116 546 DNA human leukocyte  116 ctc catgaggtat ttctacaccg ccgtgtcccg gcccggccgc ggagagcccc cgc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgccg aag aggggagccg cgggcgccgt gggtgagca ggaggggccg gagtattggg agac acagaactac aagcgccagg cacagactga ccgagtgaac ctgcggaaac cta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatgget ggg gcccgacggg cgcctcctcc gcgggcatga ccagttagcc tacgacggca ccat cgcctgaac gaggacctgc gtcctggac cgccgcggac acggcgctc cca gcgcaagtgg gaggcgccc gtgaggcgga gcagctgaga gcctacctgg cgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc  117 546	60 120 180 240 300 360 420 480 540 546
<211><212><213><400>	DNA human leukocyte	
getecca actteate egagtec acegggs tgegegg gegacet aggatta	ctc catgaggtat ttctacaccg ctgtgtcccg gcccagccgc ggagagcccc cgc agtgggctac gtggacgaca cgcagttcgt gcggttcgac agcgacgccg aag aggggagccg cgggcgccgt gggtggagca ggaggggccg gagtattggg agac acagaagtac aagcgccagg cacagactga ccgagtgaac ctgcggaaac ccta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatgget egg gcccgacggg cgcctcctcc gcgggcatga ccagttagcc tacgacggca acat cgccctgaac gaggacctgc gctcctggac cgccgcggac acggcggctc ccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg cgtg cgtggagtgg ctccgcagat acctggagaa cgggaaggag acgctgcagc	60 120 180 240 300 360 420 480 540 546

<210> 118 <211> 1094 <212> DNA <213> human leukocyte

<400> 118

60 atgcgggtca tggcgccccg aaccetcate etgctgetet egggagecet ggccctgace 120 gagacetggg cetgetecca etceatgagg tatttetaea eegeegtgte eeggeegge 180 cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagtcc aagaggggag ccgcggggcgc cgtgggtgga gcagggggg 240 300 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg agectgegga acctgegegg ctactacaac cagagegagg cegggtetea caecetecag 360 420 tggatgtatg gctgcgacct ggggcccgac gggcgcctcc tccgcgggta tgaccagtcc 480 gcctacgacg gcaaggatta categeectg aacgaggace tgcgctcctg gaccgccgcg gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgcggc ggagcagcag 540 agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 600 660 gagacgetge agegegega acacceaaag acacaegtga eccaccatet egtetetgae 720 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca 780 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 900 tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagcca 960 tetteceage ceaceatece categtggge ategttgetg geetggetgt eetggetgte 1020 ctagctgtcc taggagctgt ggtggctgtt gttatgtgta ggaggaagag ctcaggtgga aaaggagga getgetetea ggetgegtee agcaacagtg eecagggete tgatgagtet 1080 ctcatcgctt gtaa 1094

<210> 119 <211> 1094 <212> DNA <213> human leukocyte

<400> 119

atgegggtea tggegeeeg aacceteate etgetgetet egggageeet ggeeetgaee 60 gagacetggg cetgetecca etceatgagg tatttetaca eegeegtgte eeggeeegge 120 180 cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 300 aacctgcgga aactgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 360 tggatgtatg getgegacet ggggecegae gggegeetee teegegggta tgaceagtee 420 480 geetacgacg geaaggatta categeeetg aacgaggace tgegeteetg gacegeegeg 540 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgcggc ggagcagcag 600 agagectace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 660 gagacgetge agegegegga acacceaaag acacaegtga eccaceatet egtetetgae 720 catgaggcca ccetgaggtg etgggccetg ggettetace etgeggagat cacactgace 780 tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca ggagatggaa ccttccagaa gtgggcagct gtggtggtgc cttctggaga agagcagaga 840 900 tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagcca tetteccage ceaceatece categtggge ategttgetg geetggetgt cetggetgte 960 ctagetgtee taggagetgt ggtggetgtt gttatgtgta ggaggaagag etcaggtgga 1020 1080 aaaggagga getgetetea ggetgegtee agcaacagtg cecagggete tgatgagtet ctcatcgctt gtaa 1094

<210> 120 <211> 1015

<212> DNA

<213> human leukocyte

<400> 120

8-6-6-6	60
gagacctggg cctgctccca ctccatgagg tatttctaca ccgccgtgtc ccggcccggc	20
cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc	180
gacagcgacg ccgcgagtcc aagaggggag ccgcgggcgc cgtgggtgga gcaggagggg	240
ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg	300
agectgegga acctgegegg etactacaac cagagegagg eegggtetea caccetecag	360
	420
gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgccgcg	480
gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgcggc ggagcagtgg	<b>540</b>
agagcetace tggagggeae gtgcgtggag tggeteegea gatacetgga gaaegggaag	600
gagacgetge agegegegga acacceaaag acacaegtga eccaceatet egtetetgae	660
	720
tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac caggccagca	780
ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga	840
tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atgggagcca	900
tetteccage ceaceatece categtggge ategttgetg geetggetgt cetggetgte 960	0
ctagctgtcc taggagctgt ggtggctgtt gttatgtgta ggaggaagag ctcag 1	.015

<210> 121

<211> 1015

<212> DNA <213> human leukocyte

<400> 121

atgegggtea tggegececa ageceteete etgetgetet egggageeet ggecetgate 60 gagacctggg ccggctccca etccatgagg tatttetaca ccgccgtgte ccggcccgge 120 cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 180 gacagcgacg ccgcgagtcc gagaggggag ccgcgggcgc cgtgggtgga gcaggagggg 240 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg 300 aacctgcgga aactgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag 360 aggatgtatg gctgcgacct ggggcccgac gggcgcctcc tccgcgggta taaccagttc 420 gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgcggcg 480 gacacggcgg ctcagatctc ccagcgcaag ttggaggcgg cccgtgaggc ggagcagctg 540 agagcctacc tggagggcga gtgcgtggag tggctccgcg gatacctgga gaacgggaag 600 gagacgctgc agcgcgcgga acgcccaaag acacacgtga cccaccatcc cgtctctgac 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagcggg atggggagga ccaaactcag gacaccgagc ttgtggagac caggccagca 780 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaca agaacagaga 840 tacacgtgcc atgtgcagca cgaggggctg caggagccct gcaccctgag atggaagccg 900 tetteccage ceaceatece caacttggge ategtttetg geccagetgt cetggetgte 960 ctggctgtcc tggctgtcct agctgtccta ggagctgtgg tcgctgctgt gatac 1015

<210> 122

<211> 895

<212> DNA

<213> human leukocyte

<400> 122

atgegggtea tggegeceeg aacceteate etgetgetet egggageeet ggeeetgate 60 120 egeggagage ecceptteat egeagtggge tacgtggacg acaegcagtt egtgeggtte 180 gacagcgacg ccgcgagtcc gagaggggag ccgcgggcgc cgtgggtgga gcaggagggg 240 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg 300 aacctgcgga aactgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag 360 aggatgtatg getgegacet ggggcccgae gggcgcetee teegegggta taaccagtte 420 gcctacgacg gcaaggatta categecetg aacgaggace tgegeteetg gaeegeggeg 480 gacacggcgg ctcagatete ccagegcaag ttggaggegg cccgtgagge ggagcagetg 540 agagcctacc tggagggcga gtgcgtggag tggctccgcg gatacctgga gaacgggaag 600

gagacgetge agegegegga aegeccaaag acacaegtga eccaecatee egtetetgae	660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc	720
tggcagcggg atggggagga ccaaactcag gacaccgagc ttgtggagac caggccagca	780
ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaca agaacagaga	840
tacacgtgcc atgtgcagca cgaggggctg caggagccct gcaccctgag atgga	895

<210> 123 <211> 1014 <212> DNA <213> human leukocyte

<400> 123

atgcgggtca tggcgcccca agccctcctc ctgctgctct cgggagccct ggccctgatc 60 gagacetgga eeggeteeca etecatgagg tatttetaca eegeegtgte eeggeeegge 120 cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc 180 gacagcgacg ccgcgagtcc gagaggggag ccgcgggcgc cgtgggtgga gcaggagggg 240 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg 300 aacctgcgga aactgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag 360 aggatgtatg getgegacet ggggecegae gggegeetee teegegggta taaccagtte 420 gcctacgacg gcaaggatta categeeetg aacgaggace tgcgcteetg gaeegeggeg 480 gacacggcgg ctcagatctc cagcgcaagt tggaggcggc ccgtgaggcg gagcagctga 540 gagcctacct ggagggcgag tgcgtggagt ggctccgcgg atacctggag aacgggaagg 600 agacgetgea gegegeggaa egeceaaaga cacaegtgae ecaceatece gtetetgace 660 atgaggecae cetgaggtge tgggecetgg gettetaece tgeggagate acaetgaeet 720 ggcagcggga tggggaggac caaactcagg acaccgagct tgtggagacc aggccagcag 780 gagatggaac ettecagaag tgggcagetg tggtggtgce ttetggacaa gaacagagat 840 acacgtgcca tgtgcagcac gaggggctgc aggagccctg caccctgaga tggaagccgt 900 960 cttcccagcc caccatcccc aacttgggca tcgtttctgg cccagctgtc ctggctgtcc tggctgtcct ggctgtccta gctgtcctag gagctgtggt cgctgctgtg atac 1014

<210> 124 <211> 1094 <212> DNA <213> human leukocyte

<400> 124

atgcgggtca tggcgccccg agccctcctc ctgctgctct cgggaggect ggccctgacc 60 120 180 egeggagage ecceptteat etcagtggge taegtggaeg acaegeagtt egtgeggtte gacagcgacg ccgcgagtcc gagaggggag ccccgggcgc cgtgggtgga gcaggagggg 240 ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg 300 aacctgcgga aactgcgcgg ctactacaac cagagcgagg acgggtctca caccctccag 360 aggatgtttg getgegacet ggggeeggae gggegeetee teegegggta taaceagtte 420 gcctacgacg gcaaggatta catcgccetg aacgaggate tgcgctcetg gaccgccgcg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagcgg 540 agageetace tggagggeae gtgegtggag tggeteegea gatacetgga gaaegggaag 600 gagacgetge agegegegga acacecaaag acacacgtga eccaceatee egtetetgae 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc 720 tggcagtggg atggggagga ccaaactcag gacaccgagc ttgtggagac caggccagca 780 ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga 840 tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atggaagccg 900 tetteccage ceaceatece eategtggge ategttgetg geetggetgt cetggttgte ctagctgtcc taggagctgt ggtggctgtt gtgatgtgta ggaggaagag ctcaggtgga 1020 1080 aaaggaggga getgetetea ggetgegtee agcaacagtg eecagggete tgatgagtet ctcatcgctt gtaa 1094

<400> 128

gaccgccgcg gacacc

```
1094
<211>
<212>
       DNA
       human leukocyte
<213>
<400>
       125
atgegggtea tggegeeeeg ageceteete etgetgetet egggaggeet ggeeetgaee
                                                                 60
120
cgcggagagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgcggttc
                                                                 180
gacagcgacg ccgcgagtcc gagaggggag ccccgggcgc cgtgggtgga gcaggagggg
                                                                    240
ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg
                                                                   300
aacctgcgga aactgcgcgg ctactacaac cagagcgagg acgggtctca caccctccag
                                                                  360
aggatgtttg getgegacet ggggeeggae gggegeetee teegegggta taaceagtte
                                                                 420
gcctacgacg gcaaggatta catcgccctg aacgaggatc tgcgctcctg gaccgccgcg
                                                                 480
gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagcgg
                                                                   540
agagectace tggagggeae gtgcgtggag tggeteegea gatacetgga gaaegggaag
                                                                   600
gagacgetge agegegegga acacecaaag acacaegtga eccaceatee egtetetgae
                                                                  660
catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat cacactgacc
                                                                 720
tggcagtggg atggggagga ccaaactcag gacaccgagc ttgtggagac caggccagca
                                                                   780
ggagatggaa cettecagaa gtgggcaget gtggtggtge ettetggaga agagcagaga
                                                                   840
tacacgtgcc atgtgcagca cgaggggctg ccggagcccc tcaccctgag atggaagccg
                                                                 900
                                                              960
tetteceage ceaecatece categtggge ategttgetg geetggetgt eetggetgte
ctagctgtcc taggagctgt ggtggctgtt gtgatgtgta ggaggaagag ctcaggtgga
                                                                 1020
aaaggaggga getgetetea ggetgegtee agcaacagtg eecagggete tgatgagtet
                                                                 1080
ctcatcgctt gtaa
                                                                   1094
<210>
       126
<211>
       18
<212>
       DNA
<213>
       artificial sequence
<220>
<223>
       probe for detection
<400> 126
                                                                     18
caccetecag tggatgtg
<210>
       127
<211>
       18
<212>
       DNA
<213>
       artificial sequence
<220>
<223>
       probe for detection
<400> 127
ccgcgggtat gaccagta
                                                                     18
<210>
       128
<211>
       16
<212>
       DNA
<213>
       artificial sequence
<220>
<223>
       probe for detection
```

WO 200	5/063985	.*	433 / 752		PCT/JP2004/019763
<210> <211> <212> <213>	18				
<220> <223>	probe for detection				
<400> agaagte	129 gggc agctgtga			,	18
<210><211><211><212><213>	17				
<220> <223>	probe for detection				
<400>	130 gc gggtata				17
<210> <211> <212> <213>	16	-			
<220> <223>	probe for detection				
<400> gcgctcc	131 tgg accgct				16
<210> <211> <212> <213>	132 16 DNA artificial sequence				
<220> <223>	probe for detection				
<400> gcacga	132 gggg etgeca				16
<210><211><211><212><213>	18 DNA				
<220> <223>	probe for detection				
<400> ctgtcct	133 agg agctgtga				18

WO 2005	/063985	434 / 752	PCT/JP2004/019763
<210> <211> <212> <213>	18		
<220> <223>	probe for detection		
<400> cacceted	134 ag aggatgtc		18
<210> <211> <212> <213>	16		
<220> <223>	probe for detection		
<400> gggagge	135 eggc cegtgt		16
<210> <211> <212> <213>	16		
<220> <223>	probe for detection		
<400> gggcgcc	136 tcc tccgca		16
<210><211><211><212><213>	17		
<220> <223>	probe for detection		
<400> caagtgg	137 gag geggeet		17
<210><211><211><212><213>			
<220> <223>	probe for detection		

17

<400> 138

ccgtgaggcg gagcagt

WO 2005	//063985	435 / 752	PCT/JP2004/019763
<210> <211> <212> <213>	19		
<220> <223>	probe for detection		
<400> agtgaa	139 cctg cggaaacta		19
<210> <211> <212> <213>	18		
<220> <223>	probe for detection		
<400> ccctggg	140 ctt ctacccta		18
<210><211><211><212><213>	16		
<220> <223>	probe for detection		
<400> gaccgcc	141 gcg gacaca		16
<210><211><211><212><213>	16		
<220> <223>	probe for detection		
	142 ccc ggccca		16
<210> <211> <212> <213>	16		
<220> <223>	probe for detection		
<400> gaccgcci	143 gcg gacacg		16

WO 2005	5/063985	436 / 752		PCT/JP2004/019763
<210>				
<211>				
<212> <213>	artificial sequence			
<220> <223>	probe for detection			
<400>	144		Ļ	,
ccctgag	atg ggagcca		·	17
<210>				
<211><212>				
	artificial sequence			
<220>				
<223>	probe for detection			
<400>				
ggtctca	cac cctccaga			18
<210>				
<211>				
<212> <213>	artificial sequence			
<220>				•
	probe for detection			
<400>				. 17
cgcgggu	atg accagtc			17
<210>	147 <sup>-</sup>			
<211>				
<212> <213>				
<220>	artificial sequence			
	probe for detection			
<400>	147			
gcctacc	tgg agggcga			17
<210>	148			
<211>	18			
<212> <213>				
-210-	arminiai sequence			

<212> DNA <213> artificial sequence <220> <223> probe for detection <400> 148 ctcccactcc atgaggtg

WO 2005/06	3985		437 / 752			PCT/JP2004/019763
<210> 1	49	•				
<211> 1						
<212> I					·	
<213> a	rtificial sequence					
<220>						
<223> p	robe for detection					
	.49			ė	Ļ	
cgcgggcat	g accagtta					18
<210> 1		•				
<211> 1						
<212> I						
<213> a	rtificial sequence					
<220>						
<223> p	robe for detection					
<400> 1	.50					•
ggaccaaa	ct caggacact					19
<210> 1						
<211> 1						
<212> I	JNA artificial sequence					
	irtinciai sequence					
<220>						
<223> p	probe for detection					
<400> 1	151					_
caaccagag	gc gaggcca					17
,						
<210> 1						
<211> 1 <212> I						
	ona artificial sequence					
	remour soquence					
<220>	probe for detection					
•						
<400> 1		٠				10
aggccagg	tc tcacatca					18
<210>	153					
<211> 1		•				
<212> I						
<213> a	artificial sequence					
<220>						
<223> r	probe for detection					

17

<400> 153

gaagtgggca gctgtgg

WO 2005	5/063985	438 / 752		PCT/JP2004/019763
<210> <211> <212> <213>	15			·
<220> <223>	probe for detection			
<400> gcggaca	154 .cgg cggcc		ţ	15
<210><211><211><212><213>	17			
<220> <223>	probe for detection			•
<400> atggctg	155 cga cgtggga			17
<210><211><211><212><213>	17			
<220> <223>	probe for detection			
<400> ggccggg	156 rtet eacatea			17
<210><211><211><212><213>	19			
<220> <223>	probe for detection			
<400> catcatc	157 cag aggatgtac			19
<210><211><211><212><213>	19			
<220> <223>	probe for detection			
<400> ccgcaga	158 atac ctgaagaat			19

WO 200	5/063985		439 / 752	PCT/JP2004/019763
<210> <211> <212> <213>	17			
<220> <223>	probe for detection			
<400> ctcacac	159 cct ccagage		Ļ	17
<210> <211> <212> <213>	17			
<220> <223>	probe for detection			
<400> ctcctccg	160 ccg ggtatgt			17
<210> <211> <212> <213>	19			·
<220> <223>	probe for detection			
<400> cacagao	161 otga cogagtgaa			19
<210><211><211><212><213>	162 18 DNA artificial sequence			
<220> <223>	probe for detection			
<400> cgagtga	162 aacc tgcggaaa			18
<210> <211> <212> <213>	18 DNA	·		
<220> <223>	probe for detection			
<400> ggatgta	163 atgg ctgcgacg		•	18

WO 2005/0	63985	440 / 752	2	PCT/JP2004/019763
<210> <211> <212> <213>	17			
<220> <223>	probe for detection			
<400> gcctaccta	164 gg agggeet		V	17
<210> <211> <212> <213>	18			
<220> <223>	probe for detection			
	165 aga cacagaac			18
<210> <211> <212> <213>	17			
<220> <223>	probe for detection		•	
	166 cac ttcatcg			17
<210> <211> <212> <213>	18			
<220> <223>	probe for detection			
	167 gcc tgcggaaa			18
<210> <211> <212> <213>	18			

<213> artificial sequence
<220>
<223> probe for detection
<400> 168
cgcgggtatg accagtta

WO 2005/063985	441 / 752	PCT/JP2004/019763
<210> 169 <211> 15 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 169 ggaggcggcc cgtgc	,	15
<210> 170 <211> 18 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 170 ctacaaccag agcgagga		18
<210> 171 <211> 17 <212> DNA <213> artificial sequence		
<220> contact		
<400> 171 cgtgaggcgg agcagct		17
<210> 172 <211> 19 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 172 ctagctgtcc taggagcta		19
<210> 173 <211> 18 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 173 ggctacgtgg acgacaca		18

WO 2005	5/063985	442 / 752	PCT/JP2004/019763
<210><211><211><212><213>	16		
<220> <223>	probe for detection	·	
<400> gccgcgg	174 raga gececa		16
<210> <211> <212> <213>	19		
<220> <223>	probe for detection		
<400> gagatao	175 cacg tgccatgtt		19
<210> <211> <212> <213>	16		
<220> <223>	probe for detection		
<400> gagggg	176 agcc gcggga		16
<210> <211> <212> <213>	17		
<220> <223>	probe for detection	·	
<400> catcgca	177 gtg ggctacc		17
<210><211><211><212><213>	16		
<220> <223>	probe for detection		
<400> ctgcgac	178 ctg gggccg		16

WO 2005	5/063985		443 / 752		PCT/JP2004/019763
<210><211><211><211><212><213>	18				
<220> <223>	probe for detection				
<400> tetecaca	179 atc cgtgtcct			ţ	18
<210> <211> <212> <213>	17				
<220> <223>	probe for detection				
<400> caagcgo	180 ccag gcacagg				17
<210> <211> <212> <213>	16	·			
<220> <223>	probe for detection				·
<400> ggaccgo	181 egg ggacaa				16
<210><211><211><212><213>	17 DNA				•
<220> <223>	probe for detection				
<400> ctcaccc	182 tga gatgggg				17
<210> <211> <212> <213>					
<220> <223>	probe for detection		·		
<400> tgtgcgt	183 gga gtggctg				17

tgtgcgtgga gtggctg

WO 2005/063985	444 / 752	PCT/JP2004/019763
<210> 184 <211> 19 <212> DNA <213> artificial sequence	ce .	
<220> <223> probe for detection	on	
<400> 184 ccatetetga ccatgaggt	\$	19
<210> 185 <211> 18 <212> DNA <213> artificial sequence	ce	
<220> <223> probe for detection	on	
<400> 185 acctggagaa cgggaaga		18
<210> 186 <211> 18 <212> DNA <213> artificial sequence	ce	.8
<220> <223> probe for detection	on	
<400> 186 ccgcgggtat aaccagtt		18
<210> 187 <211> 15 <212> DNA <213> artificial sequence	ce	
<220> <223> probe for detection	on	
<400> 187 ggagccgcgg gcgcg		15
<210> 188 <211> 16 <212> DNA <213> artificial sequen	ce	
<220> <223> probe for detecti	on	
<400> 188		16

tccgagaggg gagccc

<b>WO 2005</b> /	063985	445 / 752		PCT/JP2004/019763
<210> <211> <212> <213>	19			
<220> <223>	probe for detection		•	
<400> gaggtat	189 Ette tacaceget		Ļ	19
<210> <211> <212> <213>	16			
<220> <223>	probe for detection			
<400>	190 gcg agtcca			16
<210><211><211><212><213>	17			
<220>	probe for detection			
<400> gtccaag	191 gagg ggagece			17
<210><211><211><212><213>	192 16 DNA artificial sequence			
<220> <223>	probe for detection			
<400> gcgccgt	192 tggg tggaga			16
<210> <211> <212> <213>	18 DNA			
<220> <223>	probe for detection			
<400>	193 ccap appatota			18

caccetecag aggatgta

WO 2005	5/063985		446 / 752		PCT/JP2004/019763
<210> <211> <212> <213>	18				
<220> <223>	probe for detection				
<400> gatcacc	194 cag cgcaagtt			<b>\</b>	18
<210> <211> <212> <213>	16				
<220> <223>	probe for detection				
<400> gacgctg	195 cag cgcgca				16
<210> <211> <212> <213>	20				
<220> <223>	probe for detection				
<400> ctctgate	196 gag teteteatea				20
<210> <211> <212> <213>	18				
<220> <223>	probe for detection				
	197 cett eccageet				18
<210> <211> <212> <213>	17	·			
<220> <223>	probe for detection				
<400> gagccta	198 acct ggaggga				17

WO 2005/063985	447 / 752	PCT/JP2004/019763
<211> 16 <212> DNA <213> artificial sequence		•
<220> <223> probe for detection	٠.	
<400> 199 tgcggcggag caggac	ķ	16
<210> 200 <211> 18 <212> DNA <213> artificial sequence		•
<220> <223> probe for detection		
<400> 200 aacctgcgcg gctactat		18
<210> 201 <211> 19 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 201 gtctcacacc ctccagaat		19
<210> 202 <211> 18 <212> DNA <213> artificial sequence		·
<220> <223> probe for detection		•
<400> 202 agctgtggtc accgctaa		18
<210> 203 <211> 18 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 203 caccetecag aggatgtt		18

<210> 204

WO 2005	//063985	448 / 752	PCT/JP2004/019763
<211><212><213>			
<220> <223>	probe for detection		•
<400> aggacga	204 ggtc tcacatca	\$	18
<210> <211> <212> <213>	19		
<220> <223>	probe for detection		
<400> acatcat	205 cca gaggatgtc		19
<210> <211> <212> <213>	17		
<220> <223>	probe for detection		
<400> tgctctca	206 gg ctgcgtg		17
<210> <211> <212> <213>	18		
<220> <223>	probe for detection		
<400> ccgcggg	207 tat gaccagtt		18
<210><211><211><212><213>	17		
<220> <223>	probe for detection		
<400> ggagacg	208 getg cagegea		17

<210> 209

WO 2005/063985	449 / 752	PCT/JP2004/019763
<211> 16 <212> DNA <213> artificial sequence		·
<220> <223> probe for detection		
<400> 209 gcccctcacc ctgagc	,	16
<210> 210 <211> 17 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 210 gggagetget etcaggt		.17
<210> 211 <211> 17 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 211 cgtacggcgg agcagct	•	17
<210> 212 <211> 18 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 212 accetecaga ggatgtae		18

<210> 213
<211> 16
<212> DNA
<213> artificial sequence
<220>
<223> probe for detection
<400> 213
tgggaggcgg cccgta

WO 2005/063985	450 / 752	PCT/JP2004/019763
<211> 19 <212> DNA <213> artificial sequence	e .	
<220> <223> probe for detection	n	
<400> 214 cgcagatacc tggagaaca	,	19
<210> 215 <211> 16 <212> DNA <213> artificial sequenc		
<220> <223> probe for detection	n	
<400> 215 gcctacctgg agggcg		16
<210> 216 <211> 18 <212> DNA <213> artificial sequenc	e	
<220> <223> probe for detection	on.	
<400> 216 gatacctgga gaacgggg		18
<210> 217 <211> 17 <212> DNA <213> artificial sequence	re	
<220> <223> probe for detection	on	
<400> 217 acctgcgctc ctggact		17
<210> 218 <211> 16 <212> DNA <213> artificial sequence	ce	
<220> <223> probe for detection	on	
<400> 218 gcgctcctgg accgcg		16

WO 2005/063985	451 / 752	PCT/JP2004/019763
<211> 17 <212> DNA <213> artificial sequence		
<220> <223> probe for detection	,	
<400> 219 agageceege tteateg		, <b>17</b>
<210> 220 <211> 18 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 220 caccetecag tggatgta		18
<210> 221 <211> 17 <212> DNA <213> artificial sequence		,
<220> <223> probe for detection		
<400> 221 cagtccgcct acgacgt		17
<210> 222 <211> 17 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 222 acaggctgac cgagtgg		17
<210> 223 <211> 20 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 223 cactccatga ggtatttctc		20
<210> 224 <211> 18		

WO 200	5/063985	452 / 752	PCT/JP2004/019763
<212> <213>	DNA artificial sequence		
<220> <223>	probe for detection		
<400>	224 cag tggatgtt	ķ	18
<210> <211> <212> <213>	18	·	
<220> <223>	probe for detection		
<400> acagget	225 gac cgagtgaa		18
<210> <211> <212> <213>	18		
<220> <223>	probe for detection		•
<400> ategece	226 tga acgaggat		18
<210> <211> <212> <213>	15 DNA		
<220> <223>	probe for detection		
<400> gcctcctc	227 ccg cgggc		15
<210> <211> <212> <213>	17		
<220> <223>	probe for detection		
<400> tcatggo	228 gcc ccgaact		17
<210> <211>			

WO 2005/063985	453 / 752	PCT/JP2004/019763
<212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 229 cgcgggcatg accagtt	· ·	17
<210> 230 <211> 17 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 230 cgcgggcatg accagtc		17
<210> 231 <211> 16 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 231 gtgcggcgga gcagca		16
<210> 232 <211> 18 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 232 gctgtggtgg ctgttgtt		18
<210> 233 <211> 16 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 233 cgtgcggcgg agcagt		16
<210> 234 <211> 18	. •	

WO 2005/063985	454 / 752	PCT/JP2004/019763
<212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 234 tggtcgctgc tgtgatac	,	18
<210> 235 <211> 16 <212> DNA <213> artificial sequence	<b>,</b>	
<220> <223> probe for detection		
<400> 235 ggctgcagga gccctg		16
<210> 236 <211> 18 <212> DNA <213> artificial sequence	·	
<220> <223> probe for detection		
<400> 236 ccctgatcga gacctgga		18
<210> 237 <211> 18 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 237 ccctcaccct gagatgga		18
<210> 238 <211> 17 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 238 ggcctggctg tcctggt		17
<210> 239 <211> 17		

WO 2005.	/063985	455 / 752	PCT/JP2004/019763
<212> <213>	DNA artificial sequence	,	
<220> <223>	probe for detection		
<400> gtggatg	239 tgt ggctgcg		17
<210> <211> <212> <213>	18	ţ	
<220> <223>	probe for detection		
<400> atgacca	240 gta cgcctacg	•	18
<210> <211> <212> <213>	16	·	
<220> <223>	probe for detection		
<400> gcggaca	241 accg cggctc		16
<210> <211> <212> <213>	18		
<220> <223>	probe for detection		
<400> gcagctg	242 tga tggtgcct		18
<210> <211> <212> <213>	18		
<220> <223>	probe for detection		
<400> cgcgggt	243 ata accagttc		18
<210> <211>			

WO 2005	5/063985	456 / 752	PCT/JP2004/019763
<212> <213>	DNA artificial sequence		
<220> <223>	probe for detection		
<400> tggaccg	244 ctg cggacac	V	17
<210> <211> <212> <213>	16	, entre de la companya del companya del companya de la companya de	
<220> <223>	probe for detection		
<400> gggctgc	245 cag agecce		16
	18		
<220> <223>	probe for detection		
<400> ggagctg	246 rtga tggctgtt		18
<210> <211> <212> <213>	17 DNA		
<220> <223>	probe for detection		
<400> gaggat	247 gtct ggctgcg		17
<210> <211> <212> <213>	16		
<220> <223>	probe for detection		
<400> ggcccgt	248 gtg gcggag		16
<210> <211>	249 18		

WO 2005/	063985	457 / 752	PCT/JP2004/019763
<212> <213>	DNA artificial sequence		
<220> <223>	probe for detection		
<400> ctcctccg	249 ca ggtatgac		18
<210><211><211><212><213>	16		
<220> <223>	probe for detection		
<400> ggcggcc	250 tgt gaggcg		16
<210><211><211><212><213>	17		
<220> <223>	probe for detection		
	251 agtg gagagcc		. 17
<210> <211> <212> <213>	18		
<220> <223>	probe for detection		
<400> gcggaa	252 acta cgcggcta		18
<210> <211> <212> <213>	19		
<220> <223>	probe for detection		
<400> ttctacc	253 cta eggagatea		19
<210> <211>			

WO 2005	/063985	458 / 752	PCT/JP2004/019763
<212> <213>	DNA artificial sequence		
<220> <223>	probe for detection		
<400> gcggaca	254 acag eggete		16
<210> <211> <212> <213>	15		
<220> <223>	probe for detection		
<400> ccggccc	255 agc cgcgg		15
<210> <211> <212> <213>	16		
<220> <223>	probe for detection		
<400> gcggaca	256 legg eggete		16
<210><211><211><212><213>	18		
<220> <223>	probe for detection		
<400> atgggag	257 geca tettecca		18
<210> <211> <212> <213>	19		
<220> <223>	probe for detection		
<400> acceteca	258 aga ggatgtatg		19
<210> <211>			

WO 2005	/063985	459 / 752	PCT/JP2004/019763
<212> <213>	DNA artificial sequence		
<220> <223>	probe for detection	·	
<400> tgaccag	259 rtcc gcctacg		17
<210> 211> <212> <213>	16	,	
<220> <223>	probe for detection		
<400> ggaggg	260 egag tgegtg		16
<210> <211> <212> <213>	19		
<220> <223>	probe for detection		
<400> ccatgag	261 gtg tttctacac		19
<210><211><211><212><213>	19		
<220> <223>	probe for detection		
<400> tgaccag	262 tta geetaegae		19
<210><211><211><212><213>	19		
<220> <223>	probe for detection		
<400> tcaggac	263 act gagcttgtg		19
<210> <211>			

WO 2005	5/063985	460 / 752	PCT/JP2004/019763
<212> <213>	DNA artificial sequence		
<220> <223>	probe for detection		
<400>			_
gcgaggo	ecag gteteac		17
<210>	265	ţ	
<211>			
<212> <213>	DNA artificial sequence		•
	armiciai sequence		
<220> <223>	probe for detection		·
<400>			
tctcacat	ca tccagagga		19
<210>	900		•
<210> <211>			
<212>	DNA		
<213>	artificial sequence		
<220> <223>	probe for detection		
<400>	266		
cagctgt	ggt ggtgcct	·,	17
		·	•
<210>			
<211> <212>	DNA		
	artificial sequence		
<220>			
	probe for detection		
<400>	267		
acggcgg	ccc agatcac		17
1010	0.00		•
<210> <211>			·
<212>	DNA		
<213>	artificial sequence		
<220>			
<223>	probe for detection		
<400>			
gacgtgg	gac ccgacg		16
<210>			
<211>	18		·

WO 2005/	063985	461 / 752	PCT/JP2004/019763
<212> <213>	DNA artificial sequence		
<220> <223>	probe for detection		
<400> gaggatg	269 tac ggctgcga		18
<210> <211> <212> <213>	19		
<220> <223>	probe for detection		
<400> cctgaag	270 aat gggaaggag		19
<210> <211> <212> <213>	18		
<220> <223>	probe for detection		
	271 agc atgtacgg		18
<210> <211> <212> <213>	18 DNA		·
<220> <223>	probe for detection		
<400> gcgggta	272 tgt ccagtacg		. 18
<210> <211> <212> <213>	17		
<220> <223>	probe for detection		
<400> ccgagte	273 gaac ctgegga		17

<210> 274 <211> 17

WO 2005	5/063985	462 / 752	PCT/JP2004/019763
<212> <213>	DNA artificial sequence		,
<220> <223>	probe for detection		
<400> ctgcgga	274 aac tgegegg		17
<210> <211> <212> <213>	16		
<220> <223>	probe for detection		
<400> ctgcgac	275 gtg gggccc		16
<210><211><211><212><213>	16		
<220> <223>	probe for detection		
<400> ggaggge	276 cetg tgcgtg		16
<210><211><211><212><213>	19		·
<220> <223>	probe for detection		
<400> gacacag	277 gaac tacaagege		19
<210> <211> <212> <213>	18		
<220> <223>	probe for detection		
<400> cacttca	278 tcg cagtgggc		18
<210> <211>	279 15		·

WO 2005	5/063985	463 / 752	PCT/JP2004/019763
<212> <213>	DNA artificial sequence		
<220> <223>	probe for detection		
<400> gcccgtg	279 egg eggag	•	15
<210> <211> <212> <213>	17	,	
<220> <223>	probe for detection		
<400> gagcgag	280 gac gggtete		17
<210> <211> <212> <213>	17		
<220> <223>	probe for detection		
<400> ggagcag	281 getg agageet		17
<210><211><211><212><213>	18		
<220> <223>	probe for detection		
<400> ctaggag	282 cta tggtggct	·	18
<210><211><211><212><213>	18		
<220> <223>	probe for detection		
<400> ggacgac	283 caca cagttcgt		18
<210> <211>			

WO 2005/	063985	464 / 752	PCT/JP2004/019763
<212> <213>	DNA artificial sequence		
<220> <223>	probe for detection		
<400> gagaged	284 ecca cttcatcg	•	18
<210><211><211><212><213>	18		
<220> <223>	probe for detection		
<400> gtgccat	285 gtt cagcacga		18
<210> <211> <212> <213>	15		
<220> <223>	probe for detection		
<400> ccgcggg	286 agc cgtgg		15
<210><211><211><212><213>	17	·	
<220> <223>	probe for detection		
<400> tgggcta	287 cct ggacgac		17
<210><211><211><212><213>	15		
<220> <223>	probe for detection		
<400> ctggggc	288 cgg acggg		15
<210> <211>	289 16		

<b>WO 2005/0</b>	63985	465 / 752	PCT/JP2004/019763
<212> <213>	DNA artificial sequence		
<220> <223>	probe for detection		
<400> cgtgtcct	289 egg cccggc		16
<210> <211> <212> <213>	17		•
<220> <223>	probe for detection		
<400> aggcaca	290 aggc tgaccga		17
<210> <211> <212> <213>	16		
<220> <223>	probe for detection		
<400> cgcggao	291 caag gegget		16
<210><211><211><212><213>	18		
<220> <223>	probe for detection		
	292 gggg gccatett		18
<210><211><212><212><213>	18		
<220> <223>	probe for detection		

18

<210> 294 <211> 18

<400> 293

ggagtggctg cgcagata

WO 2005	/063985	466 / 752		PCT/JP2004/019763
<212> <213>	DNA artificial sequence			
<220> <223>	probe for detection			
<400> accatga	294 ggt caccetga		V	18
<210><211><211><212><213>	18		,	
<220> <223>	probe for detection			
<400> aacggga	295 laga agacgetg			18
<210> <211> <212> <213>	19			
<220> <223>	probe for detection			
<400> ataacca	296 gtt cgcctacga			19
<210><211><211><212><213>	15			
<220> <223>	probe for detection			
<400>	297 ggt gggtg			15
<210> <211> <212> <213>	15			
<220> <223>	probe for detection			
<400> ggggago	298 cccc gggcg			15
<210> <211>				

WO 2005/063985	467 / 752	PCT/JP2004/019763
<212> DNA <213> artificial sequence		
<220> <223> probe for detection		. 5
<400> 299		
tacaccgctg tgtcccg		17
<210> 300		
<211> 17 <212> DNA		
<213> artificial sequence		
<220>		
<223> probe for detection		
<400> 300		
gcgagtccaa gagggga		17
<210> 301		
<211> 17	,	
<212> DNA		
<213> artificial sequence		
<220> <223> probe for detection	•	
<400> 301		-
gggtggagaa ggagggg		17
<210> 302		
<211> 18		-
<212> DNA		
<213> artificial sequence		
<220> <223> probe for detection		
<400> 302		
agaggatgta tggctgcg		18
<210> 303		•
<210> 303 <211> 17		
<212> DNA		
<213> artificial sequence		
<220> <223> probe for detection		
<400> 303 gcgcaagttg gaggcgg		
and and eather		17
<210> 304		
<211> 16		

WO 2005/063985	468 / 752	PCT/JP2004/019763
<212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 304 cagcgcgcag aacccc		. 10
		16
<210> 305	ţ	
<211> 17		
<212> DNA <213> artificial sequence		
<220>		
<223> probe for detection	~	
<400> 305		
ggctgcgtgc agcaaca		17
<210> 306		•
<211> 17		
<212> DNA		
<213> artificial sequence		
<220>		
<223> probe for detection		
<400> 306		
teccageeta ceatece		17
<210> 307		
<211> 17 <212> DNA	,	
<213> artificial sequence		
<220>		
<223> probe for detection		
<400> 307		
ctggagggac tgtgcgt		17
		17
<210> 308		
<211> 18		
<212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 308		
ggagcaggac agagccta		18
<210> 309		
<211> 19		

WO 2005/063985	469 / 752	PCT/JP2004/019763
<212> DNA <213> artificial sequence	•	` .
<220> <223> probe for detection		
<400> 309		
cggctactat aaccagagc		19
		<b>\</b>
<210> 310		
<211> 19 <212> DNA		
<213> artificial sequence		
<220>		
<223> probe for detection		
<400> 310		
cctccagaat atgtatggc		19
<210> 311		
<211> 19 <212> DNA		
<213> artificial sequence		
•		
<220> <223> probe for detection		
-		
<400> 311		10
tcaccgctaa gatgtgtag		19
<210> 312		
<211> 312<211> 18		
<212> DNA		
<213> artificial sequence		·
<220>		
<223> probe for detection		
<400> 312		
agaggatgtt tggctgcg		18
<210> 313		
<210> 313 <211> 18		
<212> DNA		
<213> artificial sequence	•	
<220>		
<223> probe for detection		
<400> 313		10
atgaccagtt cgcctacg		18
•		
<210> 314		
<211> 16		

WO 2005/063985	4707752	PCT/JP2004/019763
<212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 314 gggctgcaag agcccc		16
<210> 315 <211> 18 <212> DNA <213> artificial sequence		· · · · · · · · · · · · · · · · · · ·
<220> <223> probe for detection		
<400> 315 getetcaggt tgcgtgca		18
<210> 316 <211> 16 <212> DNA <213> artificial sequence		•
<220> <223> probe for detection		
<400> 316 ggcccgtacg gcggag		16
<210> 317 <211> 19 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 317 ctggagaaca ggaagaaga		19
<210> 318 <211> 16 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 318 ggagggcgcg tgcgtg		16
<210> 319 <211> 18		

WO 2005/063985		471 / 752	PCT/JP2004/019763
<212> DNA <213> artificia	ıl sequence		
<220> <223> probe fo	or detection		
<400> 319 cctccagagc atgta	tgg		18
<210> 320 <211> 18 <212> DNA <213> artificia	l sequence		
<220> <223> probe fo	r detection		
<400> 320 gagaacgggg agaa	agacg		18
<210> 321 <211> 16 <212> DNA <213> artificial	l sequence		
<220> <223> probe for	r detection		
<400> 321 tectggactg ccgcgg	ī	-	16
<210> 322 <211> 16 <212> DNA <213> artificial	sequence		·
<220> <223> probe for	detection		
<400> 322 tggaccgcgg cggaca	<b>a</b>		16
<210> 323 <211> 17 <212> DNA <213> artificial	sequence		
<220> <223> probe for	detection		
<400> 323 gcttcatcgc agtggg	e		17
<210> 324 <211> 18			

WO 2005/063985	472 / 752	PCT/JP2004/019763
<212> DNA <213> artificial se	quence	
<220> <223> probe for de	etection	
<400> 324 agtggatgta tggctgcg		18
<210> 325 <211> 19 <212> DNA <213> artificial se	quence	
<220> <223> probe for de	etection	
<400> 325 cctacgacgt caaggatt	a	19
<210> 326 <211> 16 <212> DNA <213> artificial se	quence	
<220> <223> probe for de	etection	
<400> 326 ccgagtgggc ctgcgg		16
<210> 327 <211> 19 <212> DNA <213> artificial se	equence	
<220> <223> probe for d	etection	
<400> 327 ggtatttete cacateegt		19
<210> 328 <211> 18 <212> DNA <213> artificial se	equence	
<220> <223> probe for d	etection	
<400> 328 agtggatgtt tggctgcg		18

<210> 329 <211> 18

WO 2005/063985	473 / 752	PCT/JP2004/019763
<212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 329 gaacgaggat etgegete		18
<210> 330 <211> 16 <212> DNA <213> artificial sequence	i,	
<220> <223> probe for detection		
<400> 330 ccgcgggcat gaccag		16
<210> 331 <211> 17 <212> DNA <213> artificial sequence		
<220> <223> probe for detection	•	
<400> 331 ccccgaacte teeteet		17
<210> 332 <211> 16 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 332 ccgcgggcat gaccag		16
<210> 333 <211> 17 <212> DNA <213> artificial sequence		
<220> <223> probe for detection	-	
<400> 333 ggagcagcag agagcct	•	17
<210> 334 <211> 19	· .	

WO 2005/063985	474 / 752	PCT/JP2004/019763
<212> DNA <213> artificial sequence	•	
<220> <223> probe for detection		
<400> 334 ggctgttgtt atgtgtagg		19
<210> 335 <211> 18 <212> DNA <213> artificial sequence	· ·	
<220> <223> probe for detection		
<400> 335 tgtggtcgct gctgtgat		18
<210> 336 <211> 16 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 336 ggagccctgc accctg		16
<210> 337 <211> 16 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 337 gacctggacc ggetec		16
<210> 338 <211> 18 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 338 ctgagatgga agccgtct		18
<210> 339 <211> 18		

WO 2005/063985	475 / 752	PCT/JP2004/019763
<212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 339 ctgtcctggt tgtcctag		18
<210> 340 <211> 23		
<212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 340 aaacacggtc acctcagggg gat		23
<210> 341 <211> 21 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 341 ggcctgagtg tggttggaac g		21
<210> 342 <211> 22 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 342 ccagetegta gttgtgtetg ca		22
<210> 343 <211> 39 <212> DNA <213> artificial sequence		
<220> <223> probe for detection		
<400> 343 aacgttcacc ttaggctgga ccatgt	gtca acttatgcc	39
<210> 344 <211> 17		

<212> DNA

<213> artificial sequence

<220>

<223> probe for detection

<400> 344

agaattacct tttccag

17

<210> 345

<211> 17

<212> DNA

<213> Homo sapiens

<400> 345

agaattacgt tttccag

## SEQUENCE LISTING DP

<110>	CANON KABUSHIKI KAISHA	
<120>	Probe set and method for identifying HLA allele	
<130>	G10003828DP	
<150> <151>	JP2003-430557 2003-12-25	
<160>	251	
<170>	PatentIn version 3.2	
<210> <211> <212> <213>	241 DNA	
tgaattte tctggag	1 tea acttatgeeg egtttgtaca gaegeataga ecaacagggg agtttatgtt gat gaagatgaga tgttetatgt ggatetggae aagaaggaga eegtetggea gag tttggeeaag eetttteett tgaggeteag ggegggetgg etaacattge tac aacaacttga atacettgat ecagegttee aaccacacte aggeeaceaa	60 120 180 240 241
<210> <211> <212> <213>	2 222 DNA Homo sapiens	
atgtteta gccttttee	2 ac agacgcatag accaacagga gagtttatgt ttgaatttga tgaagatgag tg tggatctgga caagaaggag accgtctggc atctggagga gtttggccaa it ttgaggetca gggcgggetg getaacattg etatattgaa caacaacttg ga tccagegtte caaccacact caggccacca ac	60 120 180 222
<211> <212>	3 225 DNA Homo sapiens	
gccgcgttt gagatgtt caagcctt	3 tg tacagacgca tagaccaaca ggggagttta tgtttgaatt tgatgacgat ct atgtggatct ggacaagaag gagaccgtct ggcatctgga ggagtttggc tt cetttgagge teagggeggg etggetaaca ttgetatatt gaacaacaac et tgatccageg ttecaaccac actcaggeca ccaac	60 120 180 225
<211> 2<212> 2<213> 3	4 225 DNA Homo sapiens	
gccgcgttt	4 g tacagacgca tagaccaaca ggggagttta tgtttgaatt tgatgaagat ct atgtggatct ggacaagaag gagaccgtct ggcatctgga ggagtttggc	60 120

WO 20	05/063985	PCT/JP2004/019763
caaş ttga	geetttt eetttgagge teagggeggg etggetaaca ttgetatatt gaacaaca ataeet tgateeageg ttecaaceae aeteaggeeg eeaat	ac 180 225
<210 <211 <212 <213	l> 241 2> DNA	•
tctgg	cytetca acttatecee cetttetaca gacecataga ccaacaeee agtttatee agttetatee acttatecee cetttetaca gacecataee ccaacaeee agtttatee tteet gaagateaee agacecaee cageeee agacettee teaecatee ageecaee accacactee ageceaeee teaacattee aacaacttee atacettee aaccacacte ageceaeee	gca 120
<210 <211 <212 <213	> 240 > DNA	
ctgga	gtcaa ettatgeege gtttgtacag aegeatagae caacagggga gtttatgtt tgatg aagatgagat gttetatgtg gatetggaca agaaggagae egtetgge ggagt ttggeeaaae etttteettt gaggeteagg gegggetgge taacattge gaaca acaacttgaa taeettgate eagegtteea accacactea ggeeaccaa	eat 120
<211><211><211><212><213>	241 DNA	
tctgga	tgat acttatgeeg egtttgtaca gaegeataga ceaacagggg agtttatgtt tgat gaegatgaga tgttetatgt ggatetggae aagaaggaga eegtetgge ggag tttggeegag eetttteett tgaggeteag ggegggetgg etaacattge gaac aacaacttga atacettgat eeagegttee aaccacacte aggeeaccaa	ea 120
<210><211><211><212><213>	241 DNA	
tctggag	8 stea acttatgeeg egtttgtaca gaeceataga ecaacagggg agtttatgtt gat gaagatgage agttetatgt ggatetggat aaaaaggaga eegtetgge gag tttggeegag eetttteett tgaggeteag ggegggetgg etaacattge aac aacaacttga atacettgat ecagegttee aaccacacte aggeegecaa	100
<210> <211> <212> <213>	241 DNA	

<400> 9

		•	
tgaattt tctggag	tca acttatgccg cgtttgtaca gacgcataga ccaacagggg agtttatgtt gat gaagatgagc agttctatgt ggatctggat aaaaaggaga ccgtctggca gag tttggccgag ccttttcctt tgaggctcag ggcgggctgg ctaacattgc aac aacaacttga ataccttgat ccagcgttcc aaccacactc aggccgccaa	60 120 180 240 241	
<210> <211> <212> <213>	10 241 DNA Homo sapiens		
tctggag	10ccatgtgtca acttatgccg cgtttgtaca gacgcataga ccaacagggg agat gaagatgage agttetatgt ggatctggac aagaaggaga ccgtctggca gag tttggccgag ccttttcctt tgaggctcag ggcgggctgg ctaacattgc aac aacaacttga atacettgat ccagcgttcc aaccacactc aggccgccaa	gtttatgtt 120 180 240 241	60
<210> <211> <212> <213>	11 222 DNA Homo sapiens		
cagtteta geetttte	11 cac aaacccatag accaacaggg gagtttatgt ttgaatttga tgaagatgag atg tggatctgga taaaaaggag accgtctggc atctggagga gtttggccga ct ttgaggctca gggcgggctg gctaacattg ctatattgaa caacaacttg tga tccagcgttc caaccacact caggccgcca at	60 120 180 222	·
<210><211><211><212><213>	12 241 DNA Homo sapiens		
tgaatttg tctggagg	12 ca acttatgeeg egtttgtaca gaegeataga ceaacaggag agtttatgtt gat gaagatgage agttetatgt ggatetggae aagaaggaga eegtetggea gag tttggeegag eettteett tgaggeteag ggegggetgg etaacattge aacaacttga atacettgat ceagegttee aaceacacte aggeegeaa	60 120 180 240 241	
<210> <211> <212> <213>	13 241 DNA Homo sapiens		
tgaatttg tctggagg	13 ca acttatgeeg egtttgtaca gacceataga ceaacagggg agtttatgtt at gaagatgage agttetatgt ggatetggat aagaaggaga eegtetggea gag tttggeegag eetttteett tgaggeteag ggegggetgg etaacattge ac aacaacttga atacettgat eeagegttee aaccacacte aggeegecaa	60 120 180 240	
~910 <b>&gt;</b>	14 <sup>3</sup>		

		•
<213>	Homo	sapiens

<400> 14

aacttatgcc atgtttgtac agacccatag accaacagga gagtttatgt ttgaatttga tgaagatgag cagttctatg tggatctgga taagaaggag accgtctggc atctggagga gtttggccga gccttttcct ttgaggctca gggcgggctg gctaacattg ctatattgaa caacaacttg aataccttga tccagcgttc caaccacact caggccgcca at

120 180 232

60

<210> 15

<211> 241

<212> DNA

<213> Homo sapiens

<400> 15

ccatgtgtca acttatgcca tgtttgtaca gacccataga ccaacaggag agtttatgtt tgaatttgat gaagatgagc agttctatgt ggatctggac aagaaggaga ccgtctggca tctggaggag tttggccgag ccttttcctt tgaggctcag ggcgggctgg ctaacattgc tatattgaac aacaacttga ataccttgat ccagcgttcc aaccacactc aggccgccaa t

 $\frac{60}{120}$ 

180 240

241

<210> 16

<211> 239

<212> DNA

<213> Homo sapiens

<400> 16

atgtgtcaac ttatgccatg tttgtacaga cccatagacc aacaggggag tttatgtttg aatttgatga agatgagcag ttctatgtgg atctggacaa gaaggagacc gtctggcatc tggaggagtt tggccgagcc ttttcctttg aggctcaggg cgggctggct aacattgcta tattgaacaa caacttgaat accttgatcc agcgttccaa ccacactcag gccgccaat  $\frac{60}{120}$ 

180 239

<210> 17

<211> 241

<212> DNA

<213> Homo sapiens

<400> 17

ccatgtgtca acttatgccg cgtttgtaca gacccataga ccaacagggg agtttatgtt tgaatttgat gaagatgaga tgttctatgt ggatctggac aagaaggaga ccgtctggca tctggaggag tttggccgag ccttttcctt tgaggctcag ggcgggctgg ctaacattgc tatattgaac aacaacttga ataccttgat ccagcgttcc aaccacactc aggccgccaa

 $60 \\ 120$ 

180 240

241

<210> 18

 $\mathbf{t}$ 

<211> 225

<212> DNA

<213> Homo sapiens

<400> 18

gccatgtttg tacagaccca tagaccaaca ggggagttta tgtttgaatt tgatgaagat gagatgttet atgtggatet ggacaagaag gagaccgtet ggcatetgga ggagtttggc caagcetttt cetttgagge teagggeggg etggetaaca ttgetatate gaacaacaac ttgatacct tgatecageg tteeaaceac aetcaggeca ceaac

60 120 180

.00

<211>	241		
<212>	DNA		
<213>	Homo sapiens		
	•		
<400>	19		
	tca acttatgcca tgtttgtaca gacccataga ccaacagggg agtttatgtt	60	
	gat gaagatgaga tgttctatgt ggatctggac aagaaggaga ccgtctggca	120	
	gag tttggccaag cetttteett tgaggetcag ggegggetgg etaacattge	180 240	
	aac aacaacttga ataccttgat ccagcgttcc aaccacactc aggccaccaa	240	
С		241	
<210>	20		
<211>	225		
<212>	DNA		
<213>	Homo sapiens		
<400>	20gccgcgtttg tacagacgca tagaacaaca ggagagttta tgtttgagtt tga	0	0
	tet atgtggatet ggacaagaag gagacegtet ggcatetgga ggagtttgge	120 180	
	ttt cetttgagge teagggeggg etggetaaea ttgetatatt gaacaacaae teg etatecageg ttecaaceae aeteaggeeg eeaat	225	
iigaaia	icg charceageg incaaceae acreaggeeg ceaar	220	
		•	
<210>	21		
<211>	267		
<212>	DNA		
<213>	Homo sapiens		
. 400-	0.1		
<400>	21	60	
	logt gtaccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	120	
	gata catctacaac egggaggagt acgegegett egacagegae gtgggggagt ggt gaeggagetg gggeggeetg etgeggagta etggaacage eagaaggaca	180	
	gga gaagcgggca gtgccggaca gggtatgcag acacaactac gagctggacg	240	
	gac cetgeagege egagtee	267	
666	8 6 6 6 6 6 6 6		
<210>	22 ·		
<211>	261	•	
<212>			
<213>	Homo sapiens		
<400>	22		
	tgt accagggacg gcaggaatge tacgcgttta atgggacaca gcgcttcctg	60	
	taca tetacaaceg ggaggagtac gegegetteg acagegaegt gggagagtte	120	
cgggcg	stga cggagctggg gcggcctgct gcggagtact ggaacagcca gaaggacatc	180	
ctggagg	gaga agcgggcagt gccggacagg gtatgcagac acaactacga gctggacgag	240	
gccgtga	icce tgeagegeeg a	261	
Z010s	99		
<210><211>	23 267		
<211>	DNA		
<213>	Homo sapiens		
<400>	23		
agaatt	acct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60	
tggaga	gata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt	120	
tccggg	eggt gacggagetg gggcggcetg atgaggagta etggaacage cagaaggaca	180	
	gga ggagcgggca gtgccggaca ggatgtgcag acacaactac gagctgggcg	240	
ggccca	tgac cetgeagege egagtee	267	

	•	
<210>	24	
<211>	<b></b>	
<212>	DNA	
<213>	Homo sapiens	
<400>	24	
agaatt	acct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
teegaga	gata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt	120
tectage	eggt gaeggagetg gggeggeetg atgaggagta etggaacage cagaaggaca agga ggagegggea gtgeeggaea ggatgtgeag acacaactae gagetgggeg	180 240
	tgac cetgeagege egagtee	240 267
		201
040		
<210>	25	
<211>	264	
<212><213>	DNA Homo sapiens	
<b>\</b> 210>	Tromo sapiens	
<400>	25	
agaatta	acct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
tggaga	gata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt	120
tccgggc	eggt gacggagctg gggcggcctg acgaggagta ctggaacagc cagaaggaca	180
tcctgga	gga ggagcggca gtgccggaca ggatgtgcag acacaactac gagctgggcg	240
ggcccat	gac cetgeagege egag	264
<210>	26	
<211>	263	
<212>	DNA	
<213>	Homo sapiens	
44005	0.0	
<400>	26	00
	acct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
tecesses	gata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt ggt gacggagctg gggcggcctg atgaggagta ctggaacagc cagaaggaca	120 180
tcctgga	gga ggagcgggca gttccggaca ggatgtgcag acacaactac gagctgggcg	240
ggcccat	gac cetgeagege ega	263
-010-		
<210><211>	27 264	
<211>	DNA	
<213>	Homo sapiens	
<400>	27	
agaatta	leet tttecaggga eggeaggaat getaegegtt taatgggaca eagegettee	60
tggagag	gata catctacaac cgggaagagt tcgtgcgctt cgacagcgac gtgggggagt	120
tccgggc	ggt gacggagctg gggcggcctg atgaggagta ctggaacagc cagaaggaca	180
	gga ggagcgggca gtgccggaca ggatgtgcag acacaactac gagctgggcg	240
ggcccai	gac cetgeagege egag	264
<210>	28	
<211>	264	
<212>	DNA	
<213>	Homo sapiens	
<400>	28	
	cct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
tggagag	gata catctacaac cgggaggagt ttgtgcgctt cgacagcgac gtgggggagt	120

tcctgg	scegt gacggagctg gggcggcctg atgaggagta ctggaacagc cagaaggaca agga ggagcgggca gtgccggaca ggatgtgcag acacaactac gagctgggcg atgac cctgcagcgc cgag	180 240 264
<210><211><211><212><213>	264 DNA Homo sapiens	
tcctgg:	29 cacet tttecaggga eggeaggaat getaegegtt taatgggaca eagegettee agata eatetaeaac egggaggage tegtgegett egacagegae gtgggggagt eggt gaeggagetg gggeggeetg aggeggagta etggaacage eagaaggaca agga ggageggea gtgeeggaca ggatgtgeag acacaactae gagetgggeg tgae eetgeagege egag	60 120 180 240 264
<210><211><211><212><213>	30 267 DNA Homo sapiens	
tecggge tectgga	30 acgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt cggt gacggagctg gggcggcctg atgaggacta ctggaacagc cagaaggacc agga gaagcgggca gtgccggaca gggtatgcag acacaactac gagctggacg tgac cctgcagcgc cgagtcc	60 120 180 240 267
<210><211><211><212><213>	31 264 DNA Homo sapiens	
tggagag tccgggc tcctgga	31 acgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt ggt gacggagctg gggcggcctg atgaggacta ctggaacagc cagaaggacc gga gaagcggca gtgccggaca gggtatgcag acacaactac gagctggacg gac cctacagcgc cgag	60 120 180 240 264
<210> <211> <212> <213>	32 267 DNA Homo sapiens	,
teggagag teegggeg teetggag	32 .cct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tcgcgcgctt cgacagcgac gtgggggagt ggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca gga gaagcgggca gtgccggaca ggatgtgcag acacaactac gagctgggcg gac cctgcagcgc cgagtcc	60 120 180 240 267
<210> <211>	33 267	

<210> 33 <211> 267 <212> DNA

•		
<213>	Homo sapiens	
tggagag tccgggc tcctgga	33 Lect tttecaggga eggeaggaat getaegegtt taatgggaea eagegettee gata eatetaeaac egggaggagt tegtgegett egaeagegae gtgggggagt ggt gaeggagetg gggeggeetg atgaggagta etggaaeage eagaaggaea gga gaagegggea gtgeeggaea ggatgtgeag acacaaetae gagetgggeg gae eetgeagege egagtee	60 120 180 240 267
<b>-010</b> >	,	
<210><211><211><212><213>	34 264 DNA Homo sapiens	
<400>	34	
tggagag tccgggcg tcctggag	cet tttecaggga eggeaggaat getaegegtt taatgggaca eagegettee gata eatetaeaac egggaggage tegtgegett egaeagegae gtgggggagt ggt gaeggagetg gggeggeetg aggeggagta etggaacage eagaaggaca gga gaagegggea gtgeeggaea ggatgtgeag acaeaactae gagetggaeg gae eetgeagege egag	60 120 180 240 264
<210>	35	
<211>	257	
<212> <213>	DNA Homo sapiens	
<400>	35	
tggagag tccgggcg tcctggag	egt gtaccagtta eggeaggaat getaegegtt taatgggaca eagegettee ata eatetacaae egggaggagt tegtgegett egaeagegae gtgggggagt ggt gaeggagetg gggeggeetg atgaggacta etggaaeage eagaaggace gga ggagegggea gtgeeggaea ggatgtgeag acacaactae gagetggaeg gae eetgeag	60 120 180 240 257
<210>	<b>36</b> .	
<211>	249	
<212> <213>	DNA Homo sapiens	
<400>	36	
tacatcta gtgacgga	gg gacggcagga atgctacgcg tttaatggga cacagcgctt cctggagaga ca accgggagga gttcgtgcgc ttcgacagcg acgtggggga gttccgggcg agc tggggcggcc tgatgaggag tactggaaca gccagaagga catcctggag ggg cagtgccgga cagggtatgc agacacaact acgagctgga cgaggccgtg g	60 120 180 240 249
<210>	37	
	264 DNA	
	Homo sapiens	
<400>	37	
	egt gcaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
tccgggcg tcctggag	ata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt gt gacggagctg gggcggcctg atgaggacta ctggaacagc cagaaggaca ga ggagcgggca gtgccggaca gggtatgcag acacaactac gagctggacg ac cctgcagcgc cgag	120 180 240 264

<210> 38 <211> 264 <212> DNA <213> Homo sapiens	•
<400> 38 agaattacgt gcaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggaggagta catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcggcctg atgaggagta ctggaacagc cagaaggaca tcctggagga ggagcgggca gtgccggaca gggtatgcag acacaactac gagctggacg aggccgtgac cctgcagcgc cgag	60 120 180 240 264
<210> 39 <211> 249 <212> DNA <213> Homo sapiens	
<400> 39 gtgtaccagt tacggcagga atgctacgcg tttaatggga cacagcgctt cctggagaga tacatctaca accggcagga gtacgcgcgc ttcgacagcg acgtgggaga gttccgggcg gtgacggagc tggggcggcc tgctgcggag tactggaaca gccagaagga cctcctggag gagaggcggg cagtgccgga caggatgtgc agacacaact acgagctgga cgaggccgtg accctgcag	60 120 180 240 249
<210> 40 <211> 257 <212> DNA <213> Homo sapiens	
<400> 40 agaattacgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggaggagata catctacaac aggcaggagt acgcgcgtt cgacagcgac gtgggagagt tccgggcggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggacc tcctggagga gaggcgggca gtgccggaca ggatgtgcag acacaactac gagctggacg aggccgtgac cctgcag	60 120 180 240 257
<210> 41 <211> 257 <212> DNA <213> Homo sapiens	
<400> 41 agaattacgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt acgcgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca tcctggagga ggagcgggca gtgccggaca ggatatgcag acacaactac gagctggacg aggccgtgac cctgcag	60 120 180 240 257
<210> 42 <211> 257 <212> DNA <213> Homo sapiens	
<400> 42 agaattacgt gcaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt	60 120

<212>	DNA	
<213>	Homo sapiens	
teggagag teeggge teetggag		60 120 180 240 264
<210><211><211><212><213>	45 264 DNA Homo sapiens	
tggagag tccgggcg tcctggag	45 egt geaceagtta eggeaggaat getaegegtt taatgggaea eagegettee ata eatetacaae egggaggagt tegtgegett egaeagegae gtgggggagt egt gaeggagetg gggeggeetg atgaggaeta etggaaeage eagaaggaea ega ggageggea gtgeeggaea ggatgtgeag acacaactae gagetggaeg gae eetgeagege egag	60 120 180 240 264

<210> 46 <211> 249 <212> DNA <213> Homo sapiens

<400> 46

gtgtaccagg gacggcagga atgctacgcg tttaatggga cacagcgctt cctggagaga 60 tacatctaca accgggagga gttcgtgcgc ttcgacagcg acgtggggga gttccgggcg 120 gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga catcctggag gagaagcggg cagtgccgga caggatgtgc agacacaact acgagctggt cgggcccatg 240 accctgcag 249

<210> 47 <211> 264 <212> DNA

<213>	Homo sapiens	
<400>	47	
agaattacct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggggt tccgggcggt gacggagctg gggcggcctg aggcggagta ctggaacagc cagaaggaca tcctggagga ggagcggca gtgccggaca ggatatgcag acacaactac gagctggacg aggccgtgac cctgcagcgc cgag		60 120 180 240 264
	,	
<210><211><211><212>	48 264 DNA	
<213>	Homo sapiens	
. 100:		
tggagag tccgggcg tcctggag	48 cgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt ggt gacggagctg gggcggcctg atgaggacta ctggaacagc cagaaggacc gga gaagcgggca gtgccggaca ggatgtgcag acacaactac gagctggacg gac cctgcagcgc cgag	60 120 180 240 264
<210>	49	
<211>	263	
<212> <213>	DNA Homo sapiens	
tggagag tccgggcg tcctggag	49 cgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt ggt gacggagctg gggcggcctg atgaggacta ctggaacagc cagaaggacc gga gaagcgggca gtgccggaca ggatgtgcag acacaactac gagctggacg gac cctgcagcgt cga	60 120 180 240 263
<210>	50	
<211>	264	
<212> <213>	DNA Homo sapiens	
210	TOMO Suprono	
tggagag tccgggc tcctggag	50 cet gtaccagtta cggcaggaat getacgegtt taatgggaca cagegettee gata catetacaac egggaggage tegtgegett egacagegae gtgggggagt ggt gacggagetg gggeggeetg aggeggagta etggaacage cagaaggaca gga ggageggea gtgeeggaca ggatgtgeag acacaactae gagetggaeg gac cetgeagege egag	60 120 180 240 264
<210>	51	
<211>	264	
<212> <213>	DNA Homo sapiens	
<400>	51 lect tttecaggga eggeaggaat getaegegtt taatgggaca eagegettee	60
tggagag tccgggc tcctgga	gata catctacaac cgggaggagc tcgtgcgctt cgacagcgac gtgggggagt ggt gacggagctg gggcggcctg aggcggagta ctggaacagc cagaaggaca gga ggagcgggca gtgccggaca ggatgtgcag acacaactac gagctggacg gac cctgcagcgc cgag	120 180 240 264

<210>	52	
<211>	264	
<212>	DNA	
<213>	Homo sapiens	
<400>	52	
agaatta	cct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
tggagag	ata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt	120
tccgggc	ggt gacggagetg gggcggcetg etgeggagta etggaacage cagaaggaca	180
tcctggag	gga gaagegggea gtgeeggaea ggatgtgeag acacaactae ga'getgggeg	<b>24</b> 0
ggcccat	gac cctgcagcgc cgag	264
<210>	53	
<211>	264	
<212>	DNA	
<213>	Homo sapiens	
.400-	<b>~</b> 0	
<400>	53	60
	cct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	
	gata catctacaac cgggaggagt tcgcgcgctt cgacagcgac gtggggggagt	120
	ggt gacggagetg gggcggcctg aggcggagta ctggaacagc cagaaggaca	180
	gga gaagegggea gtgeeggaea ggatgtgeag acaeaactae gagetgggeg	240
ggcccat	gae eetgeagege egag	264
<210>	54	
<210> <211>	264	
<211><212>	DNA	
<213>		
<b>\213</b> /	Homo sapiens	
<400>	54	
	legt gtaccagtta eggeaggaat getaegegtt taatgggaca eagegettee	60
	gata catctacaac egggaggagt tegtgegett egacagegae gtgggggagt	120
	ggt gacggagctg gggcggcctg atgaggagta ctggaacagc cagaaggacc	180
	gga gaagegggea gtgeeggaea gggtatgeag acaeaactae gagetggaeg	240
	gac cetgeagege egag	264
aggeege	guo confomfogo ofme	
<210>	55	
<211>	256	
<212>	DNA	
<213>	Homo sapiens	
	•	
<400>	55	
gtgtacc	agt tacggcagga atgctacgcg tttaatggga cacagcgctt cctggagaga	60
tacatcta	aca accgggagga gtacgcgcgc ttcgacagcg acgtgggaga gttccgggcg	120
gtgacgg	gage tggggeggee tgetgeggag taetggaaca gecagaagga cateetggag	180
gagaag	cggg cagtgccgga cagagtatgc agacacaact acgagctgga cgaggccgtg	240
accetge	agc gccgag	256
_		
<210>	56	
<211>	255	
<212>	DNA	
<213>	Homo sapiens	
<400>	56	00
	agt tacggcagga atgctacgcg tttaatggga cacagcgctt cctggagaga	60
tacatct	aca accgggagga gtacgcgcgc ttcgacagcg acgtggggga gttccgggcg	120

gtgacggagc tggggcggcc tgctgcggag tactggaaca gccagaagga catcctggag gagaagcggg cagtgccgga cagggtatgc agacacaact acgagctgga cgaggccgtg accctgcagc gccga	180 240 255
<210> 57 <211> 264 <212> DNA <213> Homo sapiens	
<400> 57 agaattacgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt acgcgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca tcctggagga gaagcgggca gtgccggaca ggatgtgcag acacaactac gagctggacg aggccgtgac cctgcagcgc cgag	60 120 180 240 264
<210> 58 <211> 264 <212> DNA <213> Homo sapiens	
<400> 58 agaattacet tttecaggga eggeaggaat getaegegtt taatgggaca eagegettee tggagagata catetacaac egggaggagt tegegegett egacagegae gtgggggagt teegggeggt gaeggagetg gggeggeetg atgaggagta etggaacage eagaaggace teetggagga gaagegggea gtgeeggaca ggatgtgeag acacaactae gagetggteg ggeecatgae eetgeagege egag	60 120 180 240 264
<210> 59 <211> 264 <212> DNA <213> Homo sapiens	
<400> 59 agaattacgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcggcctg atgaggacta ctggaacagc cagaaggacc tcctggagga ggagcgggca gtgccggaca gggtatgcag acacaactac gagctggacg aggccgtgac cctgcagcgc cgag	60 120 180 240 264
<210> 60 <211> 257 <212> DNA <213> Homo sapiens	
<400> 60 agaattacgt gcaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcggcctg aggcggagta ctggaacagc cagaaggaca tcctggagga ggagcggca gtgccggaca ggatgtgcag acacaactac gagctggacg aggccgtgac cctgcag	60 120 180 240 257
<210> 61 <211> 264 <212> DNA	

-100-	61	
<400> agaatta	acet tttccaggga eggeaggaat getaegegtt taatgggaca eagegettee	60
	gata catctacaac cgggaggagt tcgcgcgctt cgacagcgac gtgggggagt	12
	ggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggacc	18
tcctgga	gga gaagcgggca ttgccggaca ggatgtgcag acacaactac gagctggacg	2
aggccgt	gac cctgcagcgc cgag	:
<210>	62	
<210><211>	264	
<211><212>		
<213>		
<400>	62	
	acet tttccaggga eggeaggaat getaegegtt taatgggaca eagegettee	60
	gata catetacaac egggaggagt tegtgegett egacagegae gtgggggagt	12
	ggt gacggagctg gggcggcctg atgaggtgta ctggaacagc cagaaggaca	1
	gga ggagegggca gtgeeggaca ggatgtgeag acacaactae gagetgggeg	2
ggcccai	gac cctgcagcgc cgag	4
<210>	63	
<211>		
<212>		
<213>	Homo sapiens	
<400>	63	00
agaatta	acct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
agaatta tggaga	acet tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tcgcgcgctt cgacagcgac gtgggggagt	12
agaatta tggaga <sub>l</sub> tccgggc	acet tttccaggga eggeaggaat getaegegtt taatgggaea eagegettee gata eatetaeaae egggaggagt tegegegett egaeagegae gtgggggagt ggt gaeggagetg gggeggeetg etgeggagta etggaaeage eagaaggaea	12 18
agaatta tggaga tccgggo tcctgga	acet tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tcgcgcgctt cgacagcgac gtgggggagt	12
agaatta tggaga tccgggo tcctgga	acet tttccaggga eggeaggaat getaegegtt taatgggaca eagegettee gata eatetaeaac egggaggagt tegegegett egaeagegae gtgggggagt ggt gaeggagetg gggeggeetg etgeggagta etggaacage eagaaggaca gga ggageggea gtgeeggaca ggatgtgeag acacaactae gagetgggeg	12 18 2
agaatta tggaga tccgggo tcctgga ggcccat	acet tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tcgccgcgtt cgacagcgac gtgggggagt ggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca gga ggagcggca gtgccggaca ggatgtgcag acacaactac gagctgggcg gac cctgcag  64	12 18 2
agaatta tggaga tccgggo tcctgga ggcccat <210> <211>	acet tttccaggga eggeaggaat getaegegtt taatgggaca eagegettee gata eatetaeaac egggaggagt tegegegett egacagegae gtgggggagt ggt gaeggagetg gggeggeetg etgeggagta etggaacage eagaaggaca gga ggageggea gtgccggaca ggatgtgeag acacaactae gagetggeg gac eetgeag	12 18 2
agaatta tggaga tccgggo tcctgga ggcccat <210> <211> <212>	acet tttccaggga cggcaggaat getacgegtt taatgggaca cagegettee gata catetacaac cgggaggagt tegegegett egacagegae gtgggggagt ggt gacggagetg gggeggeetg etgeggagta etggaacage cagaaggaca gga ggageggea gtgceggaca ggatgtgeag acacaactae gagetgggeg gac cetgeag  64 257 DNA	12 18 2
agaatta tggaga tccgggo tcctgga ggcccat <210> <211>	acet tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tcgccgcgtt cgacagcgac gtgggggagt ggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca gga ggagcggca gtgccggaca ggatgtgcag acacaactac gagctgggcg gac cctgcag  64 257 DNA	12 18 2
agaatta tggaga tccgggc tcctgga ggcccat <210> <211> <212> <213> <400>	acct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tcgcgcgctt cgacagcgac gtgggggagt ggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca gga ggagcggca gtgccggaca ggatgtgcag acacaactac gagctgggcg gac cctgcag  64 257 DNA Homo sapiens 64	12 18 2
agaatta tggaga tccgggc tcctgga ggcccat <210> <211> <212> <400> agaatta	acct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tcgcgcgctt cgacagcgac gtgggggagt ggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca gga ggagcggca gtgccggaca ggatgtgcag acacaactac gagctgggcg gac cctgcag  64 257 DNA Homo sapiens 64 acct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	12 13 2 2
agaatta tggaga tcctgga ggcccat <210> <211> <212> <400> agaatta tggaga	acct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tcgcgcgctt cgacagcgac gtgggggagt ggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca gga ggagcggca gtgccggaca ggatgtgcag acacaactac gagctgggcg gac cctgcag  64 257 DNA Homo sapiens  64 acct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagc tcgtgcgctt cgacagcgac gtgggggagt	12 18 2
agaatta tggaga tccgggc tcctgga ggcccat <210> <211> <212> <213> <400> agaatta tggaga tccgggc	acct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tcgcgcgctt cgacagcgac gtgggggagt ggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca gga ggagcggca gtgccggaca ggatgtgcag acacaactac gagctgggcg gac cctgcag  64 257 DNA Homo sapiens  64 acct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt ccgtcgcgtt cgacagcgac gtgggggagt ggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggacc	12 13 2 2 3
agaatta tggaga tcctgga ggcccat <210> <211> <212> <213> <400> agaatta tggaga tcctgga	acct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tcgcgcgctt cgacagcgac gtgggggagt ggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca gga ggagcggca gtgccggaca ggatgtgcag acacaactac gagctgggcg gac cctgcag  64 257 DNA Homo sapiens  64 acct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagc tcgtgcgctt cgacagcgac gtgggggagt	12 18 2 2 3 60 12 18
agaatta tggaga tccgggc tcctgga ggcccat <210> <211> <212> <213> <400> agaatta tggaga tccgggc tcctgga ggcccat	acet tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tcgcggagta ctggaacagc aggaggagt ggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca gga ggagcggca gtgccggaca ggatgtgcag acacaactac gagctggcg gac cctgcag  64 257 DNA Homo sapiens 64 acet tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagc tcgtgcgctt cgacagcgac gtgggggagt ggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggacc gga gaagcgggca ttgccggaca ggatgtgcag acacaactac gagctggtcg gac cctgcag	12 13 2 3 60 12 18 24
agaatta tggaga tccgggc tcctgga ggcccat <210> <211> <212> <213> <400> agaatta tccgggc tcctgga ggcccat	acet tttccaggga cggcaggaat getacgcgtt taatgggaca cagcgettee gata catetacaac egggaggagt tegeggagta etggaacage aggagggagt ggg ggaggget gggeggeet etgeggagta etggaacage cagaaggaca gga ggaggggca gtgccggaca ggatgtgcag acacaactac gagetgggeggac eetgcag  64 257 DNA Homo sapiens  64 acet tttccaggga eggcaggaat getacgegtt taatgggaca cagegettee gata catetacaac egggaggage tegtgegett egacagegac gtgggggagt eggt gacggagta gggeggeett etgeggagta etggaacage eagaaggace gga gaagegggea ttgccggaca ggatgtgcag acacaactac gagetggteg gac eetgcag  65	12 13 2 3 60 12 18 24
agaatta tggaga; tcctgga ggcccat <210> <211> <212> <213> <400> agaatta tccgggc tcctgga ggcccat	acet tttccaggga cggcaggaat getacgcgtt taatgggaca cagcgettee gata catetacaac egggaggagt tegeggagta etggaacage aggaggagt ggg ggaggeggeetg etgeggagta etggaacage cagaaggaca gga ggageggea gtgccggaca ggatgtgcag acacaactac gagetggeg gac eetgcag  64 257 DNA Homo sapiens  64 acet tttccaggga eggcaggaat getacgegtt taatgggaca cagegettee gata catetacaac egggaggage tegtgegett egacagegac gtggggagt ggt gacggagta gggeggeetg etgeggagta etggaacage cagaaggace ggg gaacetggagagagagagagagagagagagagagagagagagag	12 13 2 3 60 12 18 24
agaatta tggaga tccgggc tcctgga ggcccat <210> <211> <212> <213> <400> agaatta tccgggc tcctgga ggcccat	acet tttecaggga eggeaggaat getaegegtt taatgggaca eagegettee gata eatetaeaac eggaggagt tegeggagta etggaacage eagaaggaca gga ggageggea gtgeeggaca ggatgtgeag acaeaactae gagetggeg gac eetgeag  64 257 DNA Homo sapiens  64 acet tttecaggga eggeaggaat getaegegtt taatgggaca eagegettee gata eatetaeaac eggaggagat tegtgegett taatgggaca eagegettee gata eatetaeaac eggaggagat etgtgegett egacageac gtgggggagt eggt gaeggaget gggeggeett eggagata etggaacage eagaggagt eggt gaeggaget gggeggeett eggagagat etggaacage eagaggage egga gaageggeat ttgeeggaga eagaaggace egga gaageggea ttgeeggaca ggatgtgeag acaeaactae gagetggteg egac eetgeag	12 13 2 3 60 12 18 24
agaatta tggaga tcctgga ggcccat  <210> <211> <212> <400> agaatta tggaga tcctgga ggcccat  <210> <213>	acet tttecaggga eggeaggaat getaegegtt taatgggaca eagegettee gata eatetaeaac eggaggagt tegeggagta etggaacage eagaaggaca gga ggageggea gtgeeggaca ggatgtgeag acaeaactae gagetggeg gac eetgeag  64 257 DNA Homo sapiens  64 acet tttecaggga eggeaggaat getaegegtt taatgggaca eagegettee gata eatetaeaac eggaggagat tegtgegett taatgggaca eagegettee gata eatetaeaac eggaggagat etgtgegett egacageac gtgggggagt eggt gaeggaget gggeggeett eggagata etggaacage eagaggagt eggt gaeggaget gggeggeett eggagagat etggaacage eagaggage egga gaageggeat ttgeeggaga eagaaggace egga gaageggea ttgeeggaca ggatgtgeag acaeaactae gagetggteg egac eetgeag	12 13 2 3 60 12 18 24
agaatta tggaga tcctgga ggcccat  <210> <211> <212> <213>  <400> agaatta tggaga tcctgga ggcccat  <210> <211> <400>  <211> <212> <213> <400>	acet tttecaggga eggeaggaat getaegegtt taatgggaca eagegettee gata catetacaac egggaggagt tegeggagta etggaacage eagaaggaca gga ggageggea gtgeeggaca ggatgtgeag acacaactac gagetggeg gac eetgeag  64 257 DNA Homo sapiens  64 acet tttecaggga eggeaggaat getaegegtt taatgggaca eagegettee gata catetacaac egggaggagt etgtgeget tegaaggaga eggeaggagt ggt gaeggaget eetgegett egacagegae ggt gaeggagt gggeggeetg etgeggagta etggaacage eagaaggagt ggt gaeggaget gggeggeetg etgeggagta etggaacage eagaaggace gga gaagegggeat ttgeeggaaca ggatgtgeag acacaactac gagetgteg gac eetgeag	12 13 2 3 60 12 18 24
agaatta tggaga tcctgga ggcccat  <210> <211> <212> <213>  <400> agaatta tccgggc tcctgga ggcccat  <210> <410> agaatta ccgggc tcctgga ggcccat  <210> <211> <212> <410> agaatta tccggaa tcctgga ggcccat	acet tttecaggga eggeaggaat getaegegtt taatgggaca eagegettee gata catetacaae egggaggagt tegeggagta etggaacage eagaaggaca gga ggagggea gtgeeggaca ggatgtgeag acacaactae gagetggeg gac eetgeag  64 257 DNA Homo sapiens  64 acet tttecaggga eggeaggaat getaegegtt taatgggaca eagegettee gata catetacaae egggaggagt etgtgeggt taatgggaca eagegettee gata catetacaae egggaggage tegtgegett egacagegae gtgggggagt eggt gaeggaget gggeggett etgtgegett egacagegae gtgggggagt eggt gaeggaget gggeggeet etgtgegett egacagegae eagaaggace gga gaageggea ttgeeggaaca ggatgtgeag acacaactae gagetggteg egac eetgeag  65 257 DNA Homo sapiens  65	60 12 18 24 18 24 18 24 18
agaatta tggaga tccgggc tcctgga ggcccat  <210> <211> <212> <213>  <400> agaatta tccgggc tcctgga ggcccat  <210> <211> <400> agaatta tccgggc tcctgga tcctgga tcctgga tcctgga tcctgga tcccggc tcctgga tcccgggc tcctgga tcccgggc tcctgga	acct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tegeggegtt egacagegac gtgggggagt ggt gacggagctg gggcggcetg etgeggagta etggaacage cagaaggaca gga ggageggca gtgccggaca ggatgtgcag acacaactac gagctggcg gac cetgcag  64 257 DNA Homo sapiens  64 acct tttccaggga eggcaggaat getacgegtt taatgggaca eagegettee gata catctacaac egggaggage tegtgegett egacagegac gtgggggagt ggt gacggagetg gggcggcetg etgeggata etggaacage cagaaggace gga gaagegggea ttgeeggagaat getacgegtt egacageac gagaggage ggt gacggaget gggcggcetg etgeggagta etggaacage cagaaggace gga gaagegggca ttgeeggaca ggatgtgcag acacaactac gagetggteg gac cetgcag  65 257 DNA Homo sapiens  65 acgt gcaccagtta eggcaggaat gctacgegtt taatgggaca cagegettee get gcaccagtta eggcaggaat gctacgegtt taatgggaca cagegettee	60 12 18 24 24

<210> 66 <211> 264 <212> DNA <213> Homo sapiens	•
<400> 66 agaattacgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagc tcgtgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcggcctg aggcggagta ctggaacagc cagaaggaca tcctggagga gaagcgggca gtgccggaca ggatgtgcag acacaactac gagctggacg aggccgtgac cctgcagcgc cgag	60 120 180 240 264
<210> 67 <211> 256 <212> DNA <213> Homo sapiens	
<400> 67 gtgtaccagt tacggcagga atgctacgcg tttaatggga cacagcgctt cctggagaga tacatctaca accgggagga gttcgtgcgc ttcgacagcg acgtgggga gttccgggcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga catcctggag gaggagcggg cagtgccgga cagggtatgc agacacaact acgagctgga cgaggccgtg accctgcagc gccgag	60 120 180 240 256
<210> 68 <211> 249 <212> DNA <213> Homo sapiens	
<400> 68 cttttccagg gacggcagga atgctacccg tttaatggga cacagcgctt cctggagaga tacatctaca accgggagga getcgtgcgc ttcgacagcg acgtggggga gttccgggcg gtgacggagc tggggcggcc tgaggcggag tactggaaca gccagaagga catcctggag gagaagcggg cagtgccgga caggatgtgc agacacaact acgagctgga cgaggccgtg accctgcag	60 120 180 240 249
<210> 69 <211> 263 <212> DNA <213> Homo sapiens	
<400> 69 agaattacct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt acgcgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcgcctg ctgcggagta ctggaacagc cagaaggaca tcctggagga gaagcgggca gtgccggaca ggatgtgcag acacaactac gagctgggcg ggcccatgac cctgcagcgc cga	60 120 180 240 263
<210> 70 <211> 263 <212> DNA <213> Homo sapiens	
<400> 70 agaattacct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt acgcgcgctt cgacagcgac gtgggggagt	60 120

tccgggcggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca tcctggagga gaagcgggca gtgccggaca ggatgtgcag acacaactac gagctggtcg ggcccatgac cctgcagcgc cga		180 240 263
<210><211><211><212><213>	71 261 DNA Homo sapiens	
gagaga cgggcgg ctggagg	71 Ettt tecagggacg geaggaatge taegegttta atgggacaca gegetteetg taea tetacaaceg ggaggagtte gtgegetteg acagegacgt gggggagtte gtga eggagetggg geggeetgat gaggagtaet ggaacageca gaaggaette gagg agegggeagt geeggacagg atgtgeagae acaactaega getgggeggg teee tgeagegeeg a	60 120 180 240 261
<210> <211> <212> <213>	72 264 DNA Homo sapiens	
tggagag tcctgga	72 acgt gtaccagtta eggeaggaat getacgegtt taatgggaca eagegettee gata eatetacaac egggaggage tegtgegett egacagegae gtgggggagt ggt gaeggagetg gggeggeetg atgaggaeta etggaacage eagaaggaee gga ggageggea gtgeeggaca gggtatgeag acacaactae gagetggaeg gac eetgeagege egag	60 120 180 240 264
<210><211><211><212><213>	73 249 DNA Homo sapiens	
tacatcta	73 agt tacggcagga atgctacgcg tttaatggga cacagcgctt cctggagaga aca accgggagga gttcgtgcgc ttcgacagcg acgtggggga gttccgggcg agc tggggcggcc tgatgaggag tactggaaca gccagaagga cctcctggag cggg cagtgccgga cagggtatgc agacacaact acgagctgga cgaggccgtg	60 120 180 240 249
<210> <211> <212> <213>	74 264 DNA Homo sapiens	
agaatta tggagag tccgggc tcctggag	74 cct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc gata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt ggt gacggagctg gggcggcctg atgaggacta ctggaacagc cagaaggaca gga ggagcggca gtgccggaca ggatgtgcag acacaactac gagctgggcg gac cctgcagcgc cgag	60 120 180 240 264
<210> <211>	75 264	

<210> 75 <211> 264 <212> DNA

<213> Homo sapiens	
<400> 75	
agaattacct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcggcctg aggcggagta ctggaacagc cagaaggaca tcctggagga ggagcgggca gtgccggaca ggatgtgcag acacaactac gagctgggcg ggcccatgac cctgcagcgc cgag	60 120 180 240 264
<210> 76 <211> 255 <212> DNA <213> Homo sapiens	
<400> 76	
aattacettt teeaggaeg geaggaatge taegegttta atgggaeaea gegetteetg gagagataea tetacaaceg ggaggagete gtgegetteg acagegaegt gggggagtte egggeggtga eggagetggg geggeetgat gaggagtaet ggaacageea gaaggaeate etggaggagg agegggeagt geeggaeagg atgtgeagae acaactaega getgggeggg eccatgaeee tgeag	60 120 180 240 255
<210> 77	
<211> 255	
<212> DNA	
<213> Homo sapiens	
<400> 77	
aattacettt tecagggacg geaggaatge taegegttta atgggacaca gegetteetg gagagataca tetacaaceg ggaggagtac gegegetteg acagegacgt gggggagtte egggeggtga eggagetggg geggeetgat gaggagtact ggaacageca gaaggacate etggaggaga agegggeagt geeggacagg atgtgeagae acaactacga getgggeggg eccatgacee tgeag	60 120 180 240 255
<210> 78	
<211> 255	
<212> DNA	
<213> Homo sapiens	
<400> 78	
aattacgtgt accagggacg gcaggaatgc tacgcgttta atgggacaca gcgcttcctg gagagataca tctacaaccg ggaggagttc gtgcgcttcg acagcgacgt gggggagttc cgggcggtga cggagctggg gcggcctgat gaggactact ggaacagcca gaaggacctc ctggaggaga agcgggcagt gccggacagg gtatgcagac acaactacga gctggacgag gccgtgaccc tgcag	60 120 180 240 255
<210> 79	
<210> 79<211> 264	
<212> DNA	
<213> Homo sapiens	
<400> 79	
agaattacct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
tggagagata catetacaac egggaggagt tegegegett egacagegae gtgggggagt	120
tccgggcggt gacggagctg gggcggcctg atgaggagta ctggaacagc cagaaggaca tcctggagga gaagggggg gtgccggaca ggatgtgcag acceptation gamballand	180
tcctggagga gaagcgggca gtgccggaca ggatgtgcag acacaactac gagctgggcg ggcccatgac cctgcagcgc cgag	$240 \\ 264$
	204

WO 2005	/063985	494 / 752	PCT/JP2004/019763
<210> <211> <212> <213>	80 257 DNA Homo sapiens		
tggagag tccgggc tcctgga	gata catctacaac cgggag ggt gacggagetg gggegg	gaat getacgegtt taatgggaea eagegette ggagt tegtgegett egacagegae gtggggga geetg etgeggagta etggaacage eagaagga ggaea gggtatgeag acacaactae gagetgg	igt 120 acc 180
<210><211><211><212><213>	81 257 DNA Homo sapiens		
tggagag tccgggcg tcctggag	cct tttccaggga cggcagg gata catctacaac cgggag ggt gacggagctg gggcgg	gaat getaegegtt taatgggaea eagegettee gagt aegegegett egaeagegae gtggggga eetg atgaggagta etggaaeage eagaagga gaea ggatgtgeag aeacaaetae gagetggt	ngt 120 aca 180
<210> <211> <212> <213>	82 257 DNA Homo sapiens		
tggagag tccgggcg tcctggag	ata catctacaac cgggag; ggt gacggagctg gggcggc	gaat getacgegtt taatgggaca cagegettee gagt tegtgegett egacagegae gtgggggag eetg aggeggagta etggaacage cagaagga gaca gggtatgeag acacaactae gagetgga	gt 120 aca 180
<211> <212>	83 257 DNA Homo sapiens		
tggagaga tccgggcg tcctggag	egt geaceagtta eggeagg ata catetacaae egggagg gt gaeggagetg gggegge	aat getaegegtt taatgggaea eagegettee gagt tegtgegett egaeagegae gtgggggag eetg etgeggagta etggaaeage eagaaggae gaea ggatgtgeag acaeaaetae gagetgga	rt 120 ca 180
<210>	84		

<210> 84 <211> 249 <212> DNA <213> Homo sapiens

<400> 84

gtgtaccagt tacggcagga atgctacgcg tttaatggga cacagcgctt cctggagaga tacatctaca accgggagga gttcgcgcgc ttcgacagcg acgtggggga gttccgggcg

gtgacggagc tggggcggcc tgctgcggag tactggaaca gccagaagga cctcctggag gagaagcggg cagtgccgga cagggtatgc agacacaact acgagctgga cgaggccgtg accetgcag	180 240 249
<210> 85 <211> 238 <212> DNA <213> Homo sapiens	
<400> 85 cttttccagg gacggcagga atgctacgcg tttaatggga cacagcgctt cctggagaga tacatctaca accgggagga gttcgtgcgc ttcgacagcg acgtggggga gttccgggcg gtgacggagc tggggcggcc tgatgaggac tactggaaca gccagaagga cctcctggag gagaagcggg cagtgccgga cagggtatgc agacacaact acgagctgga cgaggccg	60 120 180 238
<210> 86 <211> 255 <212> DNA <213> Homo sapiens	
<400> 86 aattacgtge accagttacg geaggaatge tacgegttta atgggacaca gegetteetg gagagataca tetacaaceg ggaggagete gtgegetteg acagegacgt gggggagtte eggeggtga eggagetggg geggeetget geggagtact ggaacageca gaaggacate etggaggagg agegggeagt geeggacagg atgtgeagae acaactacga getggaegag geegtgaeee tgeag	60 120 180 240 255
<210> 87 <211> 257 <212> DNA <213> Homo sapiens	
<400> 87 agaattacct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagtt gggcggctg atgaggagta ctggaacagc cagaaggacc tcctggagga gaagcgggca gtgccggaca ggatgtgcag acacaactac gagctgggcg ggcccatgac cctgcag	60 120 180 240 257
<210> 88 <211> 257 <212> DNA <213> Homo sapiens	
<400> 88 agaattacct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcggcctg atgaggagta ctggaacagc cagaaggaca acctggagga gaagcgggca gtgccggaca ggatgtgcag acacaactac gagctgggcg ggcccatgac cctgcag	60 120 180 240 257
<210> 89 <211> 260 <212> DNA <213> Homo sapiens	

<400> 89 agaattacgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcggcctg atgaggacta ctggaacagc cagaaggacc tcctgtagga gaagcggca gtgccggaca gggtatgcag acacaactac gagctggacg aggccgtgac cctgcagcgc	60 120 180 240 260
<210> 90	
<211> 257	
<212> DNA	
<213> Homo sapiens	
<400> 90	
agaattacet tttecaggga eggeaggaat getaegegtt taatgggaca eagegettee tggagagata eatetaeaac egggaggage tegtgegett egacagegae gtgggggagt teegggeggt gaeggagetg gggeggeetg etgeggagta etggaacage eagaaggaca teetggagga gaagegggea gtgeeggaca ggatgtgeag acacaactae gagetggteg ggeecatgae eetgeag	60 120 180 240 257
<910> 01	
<210> 91 <211> 255	
<211> 255 <212> DNA	
<213> Homo sapiens	
<400> 91	
<400> 91 aattacettt tecagggacg geaggaatge taegegttta atgggacaca gegetteetg	CO
gagagataca tetacaaceg ggaggagete gtgegetteg acagegacgt gggggagtte eggegegtga eggagetggg geggeetget geggagtact ggaacageca gaaggacate etggaggaga agegggeagt geeggacagg atgtgeagae acaactacga getggaegag geegtgacee tgeag	60 120 180 240 255
<210> 92	
<210> 92 <211> 255	
<211> 200 <212> DNA	
<213> Homo sapiens	
<400> 92	
aattaagtgt accagttacg gcaggaatge tacgcgttta atgggacaca gcgcttcctg gagagataca tctacaaccg ggaggagttc gtgcgcttcg acagcgacgt gggggagttc cgggcggtga cggagctggg gcggcctgat gaggactact ggaacagcca gaaggactc ctggaggagg agcgggcagt gccggacagg atgtgcagac acaactacga gctggacgag gccgtgaccc tgcag	60 120 180 240 255
<210> 93	
<211> 264	
<212> DNA	
<213> Homo sapiens	
<400> 93	
agaattacct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
tggagagata catctacaac cgggaggagt acgcgcgctt cgacagcgac gtgggggagt	120
tccgggcggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca	180
tcctggagga gaagcgggca gtgccggaca gggtatgcag acacaactac gagctggacg	240
aggccgtgac cctgcagcgc cgag	264

<210> 94	
<211> 264	
<212> DNA	
<213> Homo sapiens	
-210 IIOMo ouplous	
<400> 94	
	00
agaattacgt gcaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
tggagagata catctacaac cgggaggagt tcgcgcgctt cgacagcgac gtgggggagt	120
tccgggcggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca	180
tcctggagga gaagcgggca gtgccggaca ggatgtgcag acacaactac gagctgggcg	240
ggcccatgac cctgcagcgc cgag	264
-010. OF	
<210> 95	
<211> 264	
<212> DNA	
<213> Homo sapiens	
<400> 95	
agaattacgt gcaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
tggagagata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt	120
tccgggcggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggacc	180
tcctggagga gaagcgggca gtgccggaca gggtatgcag acacaactac gagctggacg	240
aggeogtgac cetgeagege egag	264
	204
<210> 96	
<211> 263	
<212> DNA	
<213> Homo sapiens	
220 Monto Suplems	
<400> 96	
	00
agaattacct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
tggagagata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt	120
teeggeggt gaeggagetg gggeggeetg atgaggagta etggaacage cagaaggaca	180
teetggagga gaagegggea gtgeeggaca gggtatgeag acacaactae gagetggaeg	240
aggccgtgac cctgcagcgc cga	263
<210> 97	
<210> 37 <211> 251	
<211> 251 <212> DNA	
<213> Homo sapiens	
<100> 07	
<400> 97	
agaattacgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
tggagagata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt	120
tccgggcggt gacggactg gggcggcctg atgaggacta ctggaacagc cagaaggacc	180
teetggagga gaggegggea gtgeeggaea ggatgtgeag acacaactae gagetggaeg	240
aggccgtgac c	251
<210> 98	
<211> 255	
<212> DNA	
<213> Homo sapiens	
,	
<400> 98	
aattacgtgg accagttacg gcaggaatgc tacgcgttta atgggacaca gcgcttcctg	60
gagagataca tetacaaceg ggaggagtte gtgcgetteg acagegacgt gggggagtte	120
o o o a a seriou sound bearband and baband and areafold the Reference	120

cgggcggtga cggagctggg gcggcctgat gaggactact ggaacagcca gaaggacctc ctggaggaga agcgggcagt gccggacagg gtatgcagac acaactacga gctggacgag gccgtgaccc tgcag	180 240 255
<210> 99 <211> 255 <212> DNA <213> Homo sapiens	
<400> 99 aattacettt teeaggaeg geaggaatge taegegttta atgggaeaca gegetteetg gagagataca tetacaaceg ggaggagtte gtgegetteg acagegaegt gggggagtte egggeggtga eggagetggg geggeetget geggagtaet ggaacageea gaaggaeate etggaggagg agegggeagt geeggaeagg atgtgeagae acaactaega getgggegg eccatgaeee tgeag	60 120 180 240 255
<210> 100 <211> 255 <212> DNA <213> Homo sapiens	
<400> 100 aattacettt teeaggaeg geaggaatge taegegttta atgggaeaea gegetteetg gagagataea tetacaaceg ggaggagtte gegegetteg acagegaegt gggggagtte egggeggtga eggagetggg geggeetget geggagtaet ggaacageea gaaggaeete etggaggaga agegggeagt geeggaeagg atgtgeagae acaactaega getgggeggg eccatgaeee tgeag	60 120 180 240 255
<210> 101 <211> 255 <212> DNA <213> Homo sapiens	
<400> 101 aattacettt teeaggaeg geaggaatge taegegttta atgggaeaea gegetteetg gagagataea tetacaaceg ggaggagtte gtgegetteg acagegaegt gggggagtte egggeggtga eggagetggg geggeetgat gaggagtaet ggaacageea gaaggaeete etggaggaga agegggeagt geeggaeagg gtatgeagae acaactaega getgggeggg eecatgaeee tgeag	60 120 180 240 255
<210> 102 <211> 249 <212> DNA <213> Homo sapiens	
<400> 102 gtgtaccagt tacggcagga atgctacgcg tttaatggga cacagcgctt cctggagaga tacatctaca accggcagga gtacgcgcgc ttcgacagcg acgtgggaga gttccgggcg gtgacggagc tgggggggcc tgctgcggag tactggaaca gccagaagga cctcctggag gagaggcggg cagtgccgga caggatgtgc agacacaact acgagctggt cgggcccatg accctgcag	60 120 180 240 249
<210> 103	

<211> 249 <212> DNA

		•
<213>	Homo sapiens	
<400>	103	
cttttcca	gg gacggcagga atgctacgcg tttaatggga cacagcgctt cctggagaga	60
	ica accgggagga gttcgtgcgc ttcgacagcg acgtggggga gttccgggcg	120
gtgacgg	agc tggggcggcc tgatgaggag tactggaaca gccagaagga catcctggag	180
	eggg cagtgeegga cagggtatge agacacaact acgagetggg egggeecatg	240
accetge		249
010	104	
<210>	104	
<211>	257	
<212> <213>	DNA Homo conjone	
<b>\</b> 213>	Homo sapiens	
<400>	104	
agaatta	cgt gcaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
	ata catctacaac cgggaggagt tcgcgcgctt cgacagcgac gtgggggagt	120
	ggt gacggagctg gggcggcctg atgaggacta ctggaacagc cagaaggacc	180
	gga gaagegggea gtgeeggaea gggtatgeag acacaactae gagetggaeg	240
aggccgt	gac cetgcag	257
<210>	105	
<211>	264	
<212>	DNA	
<213>	Homo sapiens	
-10	222.00 00.00.00	
<400>	105	
	cct tttccaggga ctgcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
	gata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt	120
	ggt gacggagctg gggcggcctg atgaggagta ctggaacagc cagaaggaca	180
	gga gaagcgggca gtgccggaca ggatgtgcag acacaactac gagctgggcg	$\frac{240}{264}$
ggcccat	gae eetgeagege egag	264
<210>	106	
<211>	264	
<212>	DNA	
<213>	Homo sapiens	
<400>	106	60
	legt gtaccagtta eggeaggaat getaegegtt taatgggaca eagegettee	120
	gata catctacaac egggaggagt tegtgegett egacagegae gtgggggagt ggt gaeggagetg gggeggeetg atgaggaeta etggaacage eagaaggaee	180
	gga gaagegggea gtgetggaea gggtatgeag acacaactae gagetggaeg	240
	gac cetgeagege egag	264
aggeeg		_01
<210>	107	
<211>	264	
<212>	DNA	
<213>	Homo sapiens	
<400>	107	
	acgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
	gata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt	120
tccgggc	egt gacggagctg gggcggcctg atgaggagta ctggaacagc cagaaggaca	180
tcctgga	gga gaagcgggca gtgccggaca gggtatgcag acacaactac gagctggacg	240
	tgac cctgcagcgc cgag	264

WO 2005/063985

<400>

<210>

<211>

<212>

<210>

<212>

<210>

<400> 111

<211>

<400> 109

ggcccatgac c

109

264

DNA

DNA

111

264 <212> DNA

<210> 108 <211>

251

ggcccatgac cctgcagcgc cgag <210> 112 <211> 263 <212> DNA <213> Homo sapiens <400> agaattacet tttccaggga eggeaggaat getaegegtt taatgggaca eagegettee 60 tggagagata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt 120 tccgggcggt gacggagctg gggcggcctg aggaggagta ctggaacagc cagaaggaca 180 teetggagga gaagegggea gtgeeggaca gggtatgeag acacaactae gagetggaeg 240

aggeegtgae eetgeagege ega	263
<210> 113 <211> 264 <212> DNA <213> Homo sapiens	
<400> 113 agaattacgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt acgcgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca tcctggagga gaagcgggca gtgccggaca ggatgtgcag acacaactac gagctggacg aggccgtgac cctgcagcac cgag	60 120 180 240 264
<210> 114 <211> 262 <212> DNA <213> Homo sapiens	
<400> 114 gaattacgtg caccagttac ggcaggaatg ctacgcgttt aatgggacac agcgcttcct ggaggagatac atctacaacc gggaggagtt cgtgcgcttc gacagcgacg tgggggagtt ccgggcggtg acggagctgg ggcggcctga tgaggactac tggaacagcc agaaggacat cctggaggag gagcgggcag tgccggacag gatgtgcaga cacaactacg agctgggcgg gcccatgacc ctgcagcgcc ga	60 120 180 240 262
<210> 115 <211> 264 <212> DNA <213> Homo sapiens	
<400> 115 agaattacgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt tegtgegett cgacagcgac gtgggggagt teegggeggt gacggagetg gggeggeetg etgeggagta etggaacage cagaaggace teetggagga gaagegggea gtgeeggaca ggatgtgeag acacaactac gagetggacg aggeegtgac cetgcagege egag	60 120 180 240 264
<210> 116 <211> 264 <212> DNA <213> Homo sapiens	
<400> 116 agaattacgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcggcctg atgaggacta ctggaacagc cagaaggaca tcctggagga ggagcgggca gtgccggaca gggtatgcag acacaactac gagctggacg aggccgtgac cctgcagcgc cgag	60 120 180 240 264
<210> 117 <211> 264 <212> DNA <213> Homo sapiens	

400× 117		
<400> 117 agaattacgt gtaccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt acgcgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca tcctggagga gaagcggca gtgccggaca ggatgtgcag acacaactac gagctggacg aggccgtgac cctgcagcgc cgag	60 120 180 240 264	
<210> 118 <211> 264 <212> DNA <213> Homo sapiens		
<400> 118 agaattacgt gtaccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt tcgcgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaaggaca tcctggagga gaagcgggca gtgccggaca gggtatgcag acacaactac gagctggacg aggccgtgac cctgcagcgc cgag	60 120 180 240 264	
<210> 119 <211> 264 <212> DNA <213> Homo sapiens		
<400> 119 agaattacgt gcaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggaggagata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcggcctg atgaggacta ctggaacagc cagaaggacc tcctggagga gaagcgggca gtgccggaca ggatgtgcag acacaactac gagctggacg aggccgtgac cctgcagcgc cgag	60 120 180 240 264	
<210> 120<211> 264 <212> DNA <213> Homo sapiens		
<400> 120agaattacgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca ca tggagagata catctacaac cgggaggagt tcgcgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcggcctg atgaggacta ctggaacagc cagaaggacc tcctggagga gaagcgggca gtgccggaca gggtatgcag acacaactac gagctggacg aggccgtgac cctgcagcgc cgag	120 180 180 240 264	60
<210> 121 <211> 264 <212> DNA <213> Homo sapiens		
<400> 121 agaattacgt gtaccagtta cggcaggaat gctacgcgtt taatgggaca cagcgcttcc tggagagata catctacaac cgggaggagt tcgtgcgctt cgacagcgac gtgggggagt tccgggcggt gacggagctg gggcggcctg atgaggagta ctggaacagc cagaaggaca tcctggagga ggagcgggca gtgccggaca ggatgtgcag acacaactac gagctggacg aggccgtgac cctgcagcgc cgag	60 120 180 240 264	
<910> 199		

<210> 122 <211> 264

<212> <213>		
<400>	122	
agaatt	acct tttccaggga cggcaggaat gctacgcgtt taatgggaca cagcgcttcc	60
tggaga	gata catctacaac cgggaggagt acgcgcgctt cgacagcgac gtgggggagt	120
tccggg	cggt gacggagctg gggcggcctg ctgcggagta ctggaacagc cagaagcaca	180
rcctgg	agga gaagegggea gtgeeggaea ggatgtgeag acacaactae gagetgggeg tgae eetgeagege egag	240
ggccca	igac congragogo ogag	264
<210>	123	
<211> <212>	18 . DNA	
<213>	Homo sapiens	
-10	Tomo suprens	
<400>	123	
acgcata	agac caacaggg	18
<210>	124	
<211>	23	
<212>		
<213>	Homo sapiens	
<400>	124	
agtttat	gtt tgaatttgat gaa	23
<210>	125	
<211>	18	
<212>	DNA	
<213>	Homo sapiens	
<400>	125	
	gag tttggcca	18
35 \$		10
<010s	100	
<210><211>	126 19	
<211>		
	Homo sapiens	
<400>	126	
gacgcat	aga ccaacagga	19
	127	
<211>		
<212>	Homo sapiens	
-410-	riomo sapiens	
<400>		
gtttatgt	tt gaatttgatg ac	22
<210>	128	
<211>	18	
<212>	DNA	
<213>	Homo sapiens	

WO 2005/063985	504 / 752	PCT/JP2004/019763	
<400> 128 cacactcagg ccgccaat		18	
<210> 129 <211> 21 <212> DNA <213> Homo sapiens		·	
<400> 129 ttctatgtgg atctggataa a	<b>y</b>	21	
<210> 130 <211> 19 <212> DNA <213> Homo sapiens	. ·		
<400> 130 ctggaggagt ttggccaaa		19	
<210> 131 <211> 17 <212> DNA <213> Homo sapiens			
<400> 131 ctggaggagt ttggccg		17	
<210> 132 <211> 18 <212> DNA <213> Homo sapiens			
<400> 132 gccgcgtttg tacagacc		18	
<210> 133 <211> 21 <212> DNA <213> Homo sapiens			
<400> 133 tgaatttgat gaagatgagc a		21	
<210> 134 <211> 20<212> DNA <213> Homo sapiens			
<400> 134 agttctatgt ggatctggat		20	

<210> 135 <211> 19 <212> DNA

VO 2005/063985	505 / 752	PCT/JP2004/019763
<213> Homo sapiens		
<400> 135		
gacccataga ccaacagga		19
<210> 136		
<211> 19		
<212> DNA		
<213> Homo sapiens		٧
<400> 136		
tgccatgttt gtacagacc		19
<210> 137		
<211> 19		
<212> DNA		
<213> Homo sapiens		
<400> 137		
atgtgtcaac ttatgccat	,	19
<210> 138		
<211> 20		
<212> DNA		
<213> Homo sapiens		
<400> 138		
ctggctaaca ttgctatatc		20
<210> 139		
<211> 20<212> DNA		
<213> Homo sapiens		
<400> 120		
<400> 139 catgtgtcaa cttatgccat		20
<210> 140	•	
<211> 21 <212> DNA		
<213> Homo sapiens		
_		
<400> 140 aacaacaact tgaatatcgc t	•	21
aacaacaaci igaalatege i		21
<210> 141		
<211> 16 <212> DNA		
<213> Homo sapiens		
<400> 141		16
gcagtgccgg acaggg		10
.010: 140		
<210> 142 <211> 17		
<211> 17 <212> DNA		

WO 2005	/063985	506 / 752	PC	CT/JP2004/019763
<213>	Homo sapiens			
<400>				1.77
cagigee	gga cagggta			17
<210><211>				
<212>	DNA		1	
	Homo sapiens		Ļ	
<400> tcgacag	143 cga cgtggga			17
<210> <211>			t	
<212>	DNA			
<213>	Homo sapiens			
<400>				10
caaccgg	gag gagttcgt			18
<210>				
<211> <212>				
	Homo sapiens			
<400>				
ctggggc	ggc ctgatga			17
<210>				
<211> <212>		-		
	Homo sapiens			
<400>			·	1.0
ggacate	ctg gaggagg			17
<210>				
<211> <212>				
	Homo sapiens			
<400>				
cagtgcc	gga caggatg			17
<210>				
<211> <212>				
	Homo sapiens		•	
<400>				10
acacaac	tac gagctggg			18

WO 2005/063985	507 / 752	PCT/JP2004/019763
<210> 149		
<211> 16		
<212> DNA		
<213> Homo sapiens		
<400> 149	•	
gctggggcgg cctgac		16
<210> 150	y.	
<211> 17		
<212> DNA		
<213> Homo sapiens		
<400> 150	·	
aggaggagcg ggcagtt		17
<210> 151		
<211> 20		
<212> DNA		
<213> Homo sapiens		
<400> 151		
gatacatcta caaccgggaa		20
<210> 152		
<211> 19		
<212> DNA		
<213> Homo sapiens		
<400> 152		
ctacaaccgg gaggagttt		19
<210> 153		
<210> 155 <211> 17		
<212> DNA		
<213> Homo sapiens		
<400> 153		
· ctacaaccgg gaggagc	· ·	17
· · · · · · · · · · · · · · · · · · ·		
<210> 154 <211> 16		
<211> 10 <212> DNA		
<213> Homo sapiens		
<400> 154		
gctggggcgg cctgag		16
<210> 155		
<211> 16		
<212> DNA <213> Homo sapiens		
_		
<400> 155	•	
gagctgggcg ggccca		16

WO 2005/063985	508 / 752	PCT/JP2004/019763
<210> 156 <211> 19 <212> DNA <213> Homo sapiens		
<400> 156 agaattacgt gtaccagtt		19
<210> 157 <211> 17 <212> DNA <213> Homo sapiens		<b>V</b>
<400> 157 ggcggcctga tgaggac		17
<210> 158 <211> 18 <212> DNA <213> Homo sapiens		
<400> 158 ggaacagcca gaaggacc		18
<210> 159 <211> 17 <212> DNA <213> Homo sapiens		
<400> 159 acgaggccgt gacccta		17
<210> 160 <211> 18 <212> DNA <213> Homo sapiens		
<400> 160 ctacaaccgg gaggagtt		18
<210> 161 <211> 17 <212> DNA <213> Homo sapiens		
<400> 161 aaccgggagg agctcgt		17
<210> 162 <211> 17 <212> DNA <213> Homo sapiens		
<400> 162		

WO 2005/063985	509 / 752	PCT/JP2004/019763
ggaceteetg gaggagg		17
<210> 163 <211> 19 <212> DNA <213> Homo sapiens		
<400> 163 agaattacgt gcaccagtt	· ·	19
<210> 164 <211> 19 <212> DNA <213> Homo sapiens		
<400> 164 agatacatet acaacegge		19
<210> 165 <211> 20 <212> DNA <213> Homo sapiens		
<400> 165 ggagagatac atctacaaca		20
<210> 166 <211> 17 <212> DNA <213> Homo sapiens		
<400> 166 ggcagtgccg gacagga		17
<210> 167 <211> 16 <212> DNA <213> Homo sapiens		
<400> 167 gagetggteg ggeeca		16
<210> 168 <211> 19 <212> DNA <213> Homo sapiens		·
<400> 168 gacacaacta cgagctggt		19
<210> 169 <211> 17 <212> DNA <213> Homo sapiens		

<400>	169	
	ect geagegt	17
ccgtgac	cci gagagi	<b>.</b> .
.010	100	
<210>	170	
	17	
<212>	DNA	
<213>	Homo sapiens	
	<b>-</b> Y	
<400>	170	
	tgcc ggacaga	17
555CA5	igoo ggacaga	
.0.1.0.	181	
	171	
	17	
	DNA	
<213>	Homo sapiens	
<400>	171	
	gaag cgggcat	17
994994	Page of Persons	
<010s	170	
<210>	172	
	17	
<212>		
<213>	Homo sapiens	
<400>	172	
	cctg atgaggt	17
000-00		
<210>	173	
<211>	18	
	DNA	
<213>	Homo sapiens	
	,	
<400>	173	
gacggc	agga atgctacc	18
8		
<210>	174	
	18	
<211>		
<212>		
<213>	Homo sapiens	•
<400>	174	
ggaaca	igcca gaaggact	18
		•
<210>	175	
<211>		
	DNA	
<z13></z13>	Homo sapiens	
<400>		<b></b>
ggactte	cctg gaggagg	17

<b>WO 2005</b> /	063985	511 / 752	PCT/JP2004/019763
<211> <212> <213>			
<400> ggaacag	176 gcca gaaggacaa	••	19
<210> <211> <212> <213>	18		
<400> gccagaa	177 gga ceteetgt		18
<210> <211> <212> <213>	17		
<400> gacctcct	178 gg aggagag		17
<210> <211> <212> <213>	20	·	
<400>			20
<210> <211> <212> <213>	17		
<400> gagaage	180 eggg cagtget		17
<210><211><211><212><213>	17		·
	181 ccc tgcagca		17
<212>	16		•
<400> tggggcg	182 gcc tgagga		16

<210> <211>	183 17	
<212>		
	Homo sapiens	
<400>	183	
gccgtga	accc tgcagca	17
<010s	104	
<210><211>	184	
<211><212>	18 DNA	
	Homo sapiens	
210	Tiomo sapiens	
<400>	184	
gaattad	egtg caccagtt	18
<b>-010</b> 5	105	
<210>	185	
<211> <212>	18 DNA	
	Homo sapiens	
-210-	nomo sapiens	
<400>	185	
actggaa	acag ccagaagc	18
40.1.0s	100	
<210>	186	
<211> <212>	19 DNA	
	Homo sapiens	
1210/	Tomo sapiens	
<400>	186	
accaaca	ggg gagtttatg	19
.010:	105	
	187	
<211><212>	21 DNA	
	Homo sapiens	
1210	Tiomo sapiens	
<400>	187	
gaatttg	atg aagatgagat g	21
.0.7.0.	100	
<210>	188	
<211> <212>		
	Homo sapiens	
12102	Tiomo sapiens	
<400>	188	
	cca ageetttte	19
		-*
-0.10	100	
<210>		
<211> <212>		
	Homo sapiens	
-210-	rromo sapiens	

WO 2005/063985	513 / 752	PCT/JP2004/01970
<400> 189	•	
gaccaacagg agagtttatg		20
<210> 190		
<211> 21		•
<212> DNA		
<213> Homo sapiens		
<400> 190		
gaatttgatg acgatgagat g		21
gaarrigarg acgargagar g		21
<210> 191		
<211> 20		
<212> DNA		
<213> Homo sapiens		
<400> 191		
atctggataa aaaggagacc		20
<210> 192		
<211> 20		
<212> DNA		
<213> Homo sapiens		
<400> 192		
		20
tttggccaaa cetttteett		20
<210> 193		•
<211> 19		
<212> DNA		
<213> Homo sapiens		
<400> 193		
agtttggccg agccttttc		19
<210> 194		
<211> 19		
<212> DNA		•
<213> Homo sapiens		•
<400> 194		
tgtacagacc catagacca		19
igiacagace catagacea		10
<010× 105		
<210> 195		
<211> 20		
<212> DNA		
<213> Homo sapiens		
<400> 195		
gaagatgagc agttctatgt		20
<210> 196		
<211> 20		
<211> 20 <212> DNA		
<213> Homo sapiens		
220 Homo Supromo		
.400 400		

<400> 196

WO 2005/063985	<b>014</b> 7 70Z	PCT/JP2004/019763
cgtttgtaca aacccataga		20
<210> 197		
<211> 19 <212> DNA		
<213> Homo sapiens		
<400> 197 ggatctggat aagaaggag		
ggaiciggai aagaaggag	y	19
<210> 198		
<211> 21		
<212> DNA		
<213> Homo sapiens		
<400> 198		
acttatgcca tgtttgtaca g		21
<210> 199		
<211> 21 <212> DNA		*
<213> Homo sapiens		
<400> 199		
attgctatat cgaacaacaa c		
		21
<210> 200	·	
<211> 19		
<212> DNA	•	
<213> Homo sapiens		
<400> 200		
gaatateget atceagegt		19
•		
<210> 201		· ·
<211> 17 <212> DNA		
<213> Homo sapiens		
<400> 201 taccagggac ggcagga		- <del>-</del> -
vaccasssac sscassa		17
<210> 202		
<210> 202 <211> 18		
<212> DNA		
<213> Homo sapiens		
<400> 202		
ccggacaggg tatgcaga		18
<210> 203		
<211> 18 <212> DNA		
<213> Homo sapiens		

WO 2005/063985	515 / 752	PCT/JP2004/019763
<400> 203 ggacagggta tgcagaca		18
<210> 204 <211> 17 <212> DNA <213> Homo sapiens		
<400> 204 gacgtgggag agttccg	,	17
<210> 205 <211> 19 <212> DNA <213> Homo sapiens	' .	
<400> 205 attacctttt ccagggacg		19
<210> 206 <211> 17 <212> DNA <213> Homo sapiens		
<400> 206 ggagttcgtg cgcttcg		17
<210> 207 <211> 18 <212> DNA <213> Homo sapiens		
<400> 207 ggcctgatga ggagtact		18
<210> 208 <211> 16 <212> DNA <213> Homo sapiens		
<400> 208 ggaggaggag cgggca		16
<210> 209 <211> 18 <212> DNA <213> Homo sapiens		
<400> 209 ggacaggatg tgcagaca		18

<210> 210

WO 2005/063985	516 / 752	PCT/JP2004/019763
<211> 15 <212> DNA <213> Homo sapiens		
<400> 210 gagctgggcg ggccc		15
<210> 211 <211> 17 <212> DNA <213> Homo sapiens	V	
<400> 211 cggcctgacg aggagta		17
<210> 212 <211> 17 <212> DNA <213> Homo sapiens		
<400> 212 cgggcagttc cggacag		17
<210> 213 <211> 18 <212> DNA <213> Homo sapiens		
<400> 213 caaccgggaa gagttcgt		18
<210> 214 <211> 18 <212> DNA <213> Homo sapiens		
<400> 214 ggaggagttt gtgcgctt		18
<210> 215 <211> 16 <212> DNA <213> Homo sapiens		
<400> 215 ggaggagete gtgege		16
<210> 216 <211> 16 <212> DNA <213> Homo sapiens		
<400> 216 cggcctgagg cggagt		16

WO 2005	/063985	517 / 752	PCT/JP2004/019763
<210> <211> <212> <213>	16		
<400>	217 atg accetg	•	16
<210><211><211><212><213>	18	· · · · · · · · · · · · · · · · · · ·	
<400>			18
<210><211><211><212><212>	19 DNA		
<400>	Homo sapiens 219 gac tactggaac		19
<210> <211> <212> <213>	18		
<400> cagaagg	220 gacc teetggag	•	18
<210><211><211><212><212><213>	17	·	
<400> gtgaccc	221 tac agegeeg		17
<210> <211> <212> <213>	16		
<400> ggagga	222 gttc gcgcgc		16
<210> <211> <212> <213>	17		

<400> 223

WO 2005/063985	518 / 752	PCT/JP2004/019763
ggagetegtg egetteg		17
<210> 224 <211> 20 <212> DNA <213> Homo sapiens	·	
<400> 224 aattacgtgc accagttacg	,	20
<210> 225 <211> 18 <212> DNA <213> Homo sapiens		
<400> 225 tacaaccggc aggagtac		18
<210> 226 <211> 19 <212> DNA <213> Homo sapiens		
<400> 226 atctacaaca ggcaggagt		19
<210> 227 <211> 18 <212> DNA <213> Homo sapiens		•
<400> 227 ccggacagga tatgcaga		18
<210> 228 <211> 16 <212> DNA <213> Homo sapiens		
<400> 228 cgagctggtc gggccc		16
<210> 229 <211> 18 <212> DNA <213> Homo sapiens		,
<400> 229 gccggacaga gtatgcag		18
<210> 230 <211> 17 <212> DNA	· ·	

<213> Homo sapiens

<400>	230		
gcaccag	gtta cggcagg		17
<210>	231	·	*
<211>	16		
	DNA		
	Homo sapiens		
	riomo oupromo	· ·	
<400>	231		
	attg ccggac		16
gugggua	atig coggac		10
<210>	020		
	19		
<212>			
<213>	Homo sapiens		
	232		
ctgatga	ggt gtactggaa		19
<210>	233		
<211>	20		
<212>	DNA		
<213>	Homo sapiens		
	•		
<400>	233		
	acc cgtttaatgg		20
<b>6</b> 6			
<210>	234		
	18		
<212>			
	Homo sapiens		
<b>\210</b> >	Homo sapiciis	•	
<400>	234		
	•		18
cagaag	gact teetggag		10
z010s	005		
<210>			
	18		
<212>			•
<213>	Homo sapiens		
	005		
<400>			
agaagg	acaa cctggagg		18
<210>	236		
<211>	18		
<212>	DNA		
<213>			
<400>	236		
	tgt aggagaag		18
540000	-000-5006		0
<210>	237		
-210-	10		

519 / 752

PCT/JP2004/019763

WO 2005/063985

<211> 16

WO 2005/063985		520 / 752	PCT/JP2004/019763
<212> <213>	DNA Homo sapiens		
<400> ggaggag	237 gagg cgggca		16
<210> <211> <212> <213>	17	,	
<400> ggaccag	238 tta cggcagg		17
<210> <211> <212> <213>	18		
<400> tccaggg	239 act gcaggaat		18
<210><211><211><212><213>	17		
<400> ggcagtg	240 ectg gacaggg		17
<210><211><211><212><213>	16		
<400> gctgggc	241 ggg cccatg		16
<210> <211> <212> <213>	17		
<400> cggcctg	242 agg aggagta	· .	17
<212>	243 18 DNA Homo sapiens		
<400> ggcctga	243 agga ggagtact		18

<400> agccag	244 gaagc acateetg	18
<213>	23 DNA Homo sapiens	·
<400> aaacac	eggte aceteagggg gat	23
<400> ggcctga	246 agtg tggttggaac g	21
<400>	DNA Homo sapiens	
ccagcte	gta gttgtgtctg ca	22
<210><211><211><211><212><213>	39	
	acc ttaggctgga ccatgtgtca acttatgcc	39
<210> <211> <212> <213>		
<400> aa	249	2
<212>	250 17 DNA Homo sapiens	

WO 2005/063985 522 / 752 PCT/JP2004/019763

<400> 250
agaattacet tttccag 17

<210> 251
<211> 17
<212> DNA
<213> Homo sapiens

<400> 251
agaattacet tttccag 17

## SEQUENCE LISTING DQ

<110>	CANON KABUSHIKI KAISHA	
<120>	Probe set and method for identifying HLA allele	
<130>	G10003828dq	
	JP2003-430555 2003-12-25	
<160>	244	
<170>	PatentIn version 3.2	
<210>	1	
<211>		
<212>		
	Homo sapiens	
<400>	1	
	gat ggagatgagg	20
· Baarre	24, 99, 94, 949	
<210>	2	
<211>	18	
<212>	DNA	
<213>	Homo sapiens	
<400>	9	
	cca gacaccag	18
ggigcin	cca gadaccag	10
<210>	3	
<211>		
<212>		
	Homo sapiens	
-4005		
<400>		18
ggttgtc	tgt gggcctca	10
<210>		
<211>		
<212>		
<213>	Homo sapiens	
<400>	4	
	aca ccctcatc	18
uagoroa		
,		
<210>		
<211>		
<212>		
<213>	Homo sapiens	
<400>	5	
	caat gggcacg	17
9~~9~8		- •
<210>		
<211>	18	

WO 2005/063985	524 / 752	PCT/JP2004/019763
<212> DNA <213> Homo sapiens		
<400> 6 cagagactgt ggtctgca		18
<210> 7 <211> 18 <212> DNA <213> Homo sapiens		
<400> 7 cccttgtgga ggtgaagg		18
<210> 8 <211> 18 <212> DNA <213> Homo sapiens		
<400> 8 cctgtggtca acatcacc		18
<210> 9 <211> 17 <212> DNA <213> Homo sapiens		
<400> 9 ccctgtggag gtgaagg		17
<210> 10 <211> 17 <212> DNA <213> Homo sapiens		
<400> 10 cctggagagg aaggagg		17
<210> 11 <211> 18 <212> DNA <213> Homo sapiens		
<400> 11 tgcctctgtt ccacagac		18
<210> 12 <211> 15 <212> DNA <213> Homo sapiens		
<400> 12 agcctgagat tccaa		15

WO 2005/063985	525 / 752	PCT/JP2004/019763
<210> 13 <211> 17 <212> DNA <213> Homo sapiens		
<400> 13 gecetgacea cegtgac		17
<210> 14 <211> 18 <212> DNA <213> Homo sapiens		
<400> 14 cacetteete cettetga		10
cacetteete cettetga		18
<210> 15 <211> 20 <212> DNA <213> Homo sapiens		
<400> 15 ttaaacgctc caactctact		20
<210> 16 <211> 17 <212> DNA <213> Homo sapiens		,
<400> 16 ccagacacca agggccc		17
<210> 17 <211> 20 <212> DNA <213> Homo sapiens		
<400>. 17 cagtgttttc caagtctcct		20
<210> 18 <211> 17 <212> DNA <213> Homo sapiens		
<400> 18 gcactggggc ctggaca		17
<210> 19		

<211> 16 <212> DNA <213> Homo sapiens <400> 19 ggtctgcgcc ctggga

WO 2005/063985	526 / 752	PCT/JP2004/019763
<210> 20 <211> 19 <212> DNA <213> Homo sapiens		
<400> 20ctgaccacgt tgcctctta	•	19
<210> 21 <211> 22 <212> DNA <213> Homo sapiens <400> 21	,	
cctaaaacat aacttgaaca gt		22
<210> 22 <211> 21 <212> DNA <213> Homo sapiens		
<400> 22 cagacaattt agatttgacc g		21
<210> 23 <211> 18 <212> DNA <213> Homo sapiens		
<400> 23 teaccetect ceettett		18
<210> 24 <211> 19 <212> DNA <213> Homo sapiens		
<400> 24 tgtaccagtc ttacggtct		19
<210> 25 <211> 17 <212> DNA <213> Homo sapiens		
<400> 25 aggtggagca ctgggga		17
<210> 26 <211> 17 <212> DNA <213> Homo sapiens	•	
<400> 26 ggtccctctg gccagtt		17

WO 2005/063985		527 / 752	PCT/JP2004/019763
<210> <211> <212> <213>	17		
<400> ccaagtc	27 tec egtgaeg		17
<210><211><211><212><213>	18		
<400> gcactga	28 caa acategee		18
<210> <211> <212> <213>	16		
<400> gggggtg	29 tac cgggca		16
<210> <211> <212> <213>	16		
<400> cgcaggg	30 gcg gcctgt		16
<210> <211> <212> <213>	31 15 DNA Homo sapiens	•	
<400>	31 eeeg ggegt		15
<210> <211> <212> <213>	32 16 DNA Homo sapiens		
<400> gggcgtc	32 ggt ggacag		16
<210> <211> <212> <213>	17		

<400> 33

<210> 40 <211> 18 <212> DNA

<213> Homo sapiens

WO 2005/06	3985	529 / 752	P	PCT/JP2004/019763
<400> 40 gaaggacato				18
<210> 41 <211> 19 <212> Di <213> Ho				
<400> 41 ggacatectg				19
<210> 42 <211> 17 <212> Di <213> Ho				
<400> 42 ctcccagcg				17
<210> 43 <211> 18 <212> D1 <213> Ho				
<400> 43				18
<210> 44 <211> 17 <212> DI <213> Ho			•	
<400> 44				17
<210> 45 <211> 18 <212> DI <213> He				
<400> 45				18
<210> 46 <211> 16 <212> D <213> H	<b>;</b>			
<400> 46				16

16

cgctggggcc gcctga

WO 2005/	063985	530 / 752	PCT/JP2004/019763
<211> <212> <213>			
<400> ctccccag	47 ca tggagac	•	17
<210> <211> <212> <213>	17	· • • • • • • • • • • • • • • • • • • •	
<400> caccccag	48 gec tecagaa		17
<210><211><211><212><213>	18		
<400>			18
<210> <211> <212> <213>	15		
<400> gctgggg	50 ecg cetge		15
<210> <211> <212> <213>	16		
<400> aggaccc	51 ggg cggagt		16
<210> <211> <212> <213>	18	•	
<400> cctccaga	52 ac cccatcat		18
<210> <211> <212> <213>	16		
<400> cggagcg	53 egt gegtet	•	16

WO 2005/063985	531 / 752	PCT/JP2004/019763
<210> 54 <211> 15 <212> DNA <213> Homo sapiens		
<400> 54 gacgccgctg gggcc		15
<210> 55 <211> 19 <212> DNA <213> Homo sapiens	· ·	
<400> 55 cagaaggaag teetggaga		19
<210> 56 <211> 18 <212> DNA <213> Homo sapiens		
<400> 56 tacttcacca acgggacc		18
<210> 57 <211> 17 <212> DNA <213> Homo sapiens		
<400> 57 cgggcggagt tggacac		17
<210> 58 <211> 17 <212> DNA <213> Homo sapiens		
<400> 58 cgtcggtgga caccgta		17
<210> 59 <211> 17 <212> DNA <213> Homo sapiens		
<400> 59 gtgggggtgt atcgggt		17
<210> 60 <211> 17 <212> DNA <213> Homo sapiens		
<400> 60tgactcccca gca	tgcc	17

WO 2005	5/063985		532 / 752		PCT/JP2004/019763
<210><211><211><212><213>	18	·			
<400> ggaaat	61 gact ccccagca			٠	18
<210> <211> <212> <213>	19			V	
<400> ggaaca	62 gcca gaaggaaga				19
<210><211><211><212><213>	17				
<400>					17
<210><211><211><212><213>	15				
<400> gccgctg	64 ggg cggct				15
<210><211><211><212><212><213>	20				
<400>					20
<210> <211> <212> <213>	17				
<400> tgtatcg	66 ggc ggtgacc				17
<210><211><211><212><213>	19				
<400>	67				

19

gtttcggaat gaccaggaa

WO 2005/063985	533 / 752	PCT/JP2004/019763
<210> 68 <211> 19 <212> DNA <213> Homo sapiens		•
<400> 68 gtgcgtcttg tgaccagat	·	19
<210> 69 <211> 17 <212> DNA <213> Homo sapiens		
<400> 69 ggcgttccgc gggatct		17
<210> 70 <211> 19 <212> DNA		
<213> Homo sapiens <400> 70 taggaatggt gactggact		19
<210> 71		
<211> 18 <212> DNA <213> Homo sapiens		
<400> 71 gagcgcgtgc gtcttgta	•	18
<210> 72 <211> 19 <212> DNA <213> Homo sapiens		
<400> 72 caggccagat caaagtcca		19
<210> 73 <211> 16 <212> DNA <213> Homo sapiens		
<400> 73 cgtgggggtg taccgc		16
<210> 74 <211> 18 <212> DNA <213> Homo sapiens		
<400> 74		

0 _00.	0,000,00	301. TO-	
20022	steet ggagagga		. 10
aggaag	sicci ggagagga		18
<210>			
<211>			
<212>	DNA		
<213>	Homo sapiens		
<400>			
acacaa	ctac gaggtggg	<b>Y</b>	18
<210>	76		
<211>	19		
<212>		•	
	Homo sapiens		
<400>			
gtgcgtc	ttg taaccagat		19
<210>	77		
<211>	16		
<212>			
	Homo sapiens		
<400>			
gcaggg	gegg cetgte		16
<210>	78		
<211>			
<212>			
	Homo sapiens		
	nomo sapions		
<400>			
caactac	gag gtggcgtt		18
<210>	70		
<210> <211>			
<212>			
<213>	Homo sapiens		
<400>	79		
	gat gccgaga		17
5-55-0	Par Propuga		11
-0.10	0.0		
<210>			
<211>			
<212>			
<213>	Homo sapiens		
<400>	80		
			10
RRRCRR	tgac gccgct		16
<210>	81		
<211>	16		
<212>			

534 / 752

PCT/JP2004/019763

WO 2005/063985

WO 2005/063985	535 / 752	PCT/JP2004/019763
<213> Homo sapiens		
<400> 81 cgctggggcg gcctga		16
<210> 82 <211> 16 <212> DNA <213> Homo sapiens		· · · · · · · · · · · · · · · · · · ·
<400> 82 gggacccggg cggagt		16
<210> 83 <211> 19 <212> DNA <213> Homo sapiens		
<400> 83 ggagatgagg agttetacg		19
<210> 84 <211> 18 <212> DNA <213> Homo sapiens		
<400> 84 cagacaccag gggccatt		18
<210> 85 <211> 18 <212> DNA <213> Homo sapiens		
<400> 85 gtgggcctca tgggcatt	1	18
<210> 86 <211> 19 <212> DNA <213> Homo sapiens		
<400> 86 cacceteate tgtettgtg		19
<210> 87 <211> 18 <212> DNA <213> Homo sapiens	·	
<400> 87 aatgggcacg cagtcaca		18

WO 2005/063985	536 / 752	PCT/JP2004/019763
<210> 88 <211> 16 <212> DNA <213> Homo sapiens		
<400> 88 ggtctgcacc ctgggg	•	16
<210> 89 <211> 18 <212> DNA <213> Homo sapiens	,	
<400> 89 gaggtgaagg cattgtgg		18
<210> 90 <211> 18 <212> DNA <213> Homo sapiens	· .	
<400> 90 caacatcacc tggctgag		18
<210> 91 <211> 17 <212> DNA <213> Homo sapiens	,	
<400> 91 ggaaggaggc tgcctgg		17
<210> 92 <211> 23 <212> DNA <213> Homo sapiens		
<400> 92 ctgttccaca gacttagacc ttt		23
<210> 93 <211> 20 <212> DNA <213> Homo sapiens		·
<400> 93 gagattccaa cacctatgtc		20
<210> 94 <211> 17 <212> DNA <213> Homo sapiens		·
<400> 94 caccgtgacg agccctt	•	17

WO 2005/063985	00111 <u>0</u> 2	PCT/JP2004/019763
<210> 95		
<211> 20		
<212> DNA <213> Homo sapiens	•	
110mo sapiens		
<400> 95	•	
ctcccttctg atgatgagat		20
<210> 96		
<211> 19	¥	
<212> DNA	,	
<213> Homo sapiens		
<400> 96		
caactctact gctgctacc	•	19
<210> 97		
<211> 17	•	
<212> DNA <213> Homo sapiens		
110mo sapiens		
<400> 97		
catcatccga ggcctgc		17
<210> 98		
<211> 18		
<212> DNA <213> Homo sapiens		
Tromo sapiens	,	
<400> 98		
caagteteet gtgaeget		18
<210> 99	•	
<211> 18 <212> DNA		
<213> Homo sapiens		
<400> 99		
ggcctggaca agcctctt		18
4040: 400		
<210> 100 <211> 18		
<211> 18 <212> DNA		
<213> Homo sapiens		
<400> 100		•
cgccctggga ttgtctgt		
S 555 <b>5</b> -5-5-5		18
<210> 101		
<210> 101 <211> 20		
<212> DNA		
<213> Homo sapiens		
<400> 101		
gttgcctctt atggtgtaaa		90
- 00 8		20

<210>	102	·			•
<211>	22				
<212>	DNA				
	Homo sapiens				
~210~	Homo sapiens			•	
<400>	102				
					22
aacttgaa	ıca gtctgattaa ac				22
				· ·	
.0.7.0.	100				
<210>	103				
<211>	22				
<212>					
<213>	Homo sapiens				
<100>	100				
	103				
acgtttga	cc ggcaatttgc ac				22
0 0	00 0				
<210>	104				
<211>					
	18				
<212>	DNA				
	Homo sapiens				
~210~	Homo sapiens				
<400>	104				
					18
erecerre	t ctgaggag				10
-010	105				
<210>	105				
<211>	18				
<212>					
<213>	Homo sapiens				
<400>	105				
					10
cttacggt	ct ctctggcc		•	•	18
	•				
<210>	106				
<211>	18				
	DNA				
<213>	Homo sapiens				
-20					
				•	
<400>	106				
geacteg	gga ctggacaa				18
Percepp	sea coesacaa				.=-
<210>	107				
<211>	18				
<212>	DNA				
~413>	Homo sapiens				
<400>	107				
					10
ctggcca	gtt cacccatg				18
-					
	100				
<210>	108				
<211>	16				
<212>					
<213>	Homo sapiens				
	•				

WO 2005/063985	539 / 752	PCT/JP2004/019763
<400> 108 cccgtgacgc tgggtc		16
<210> 109 <211> 20 <212> DNA <213> Homo sapiens		
<400> 109 caaacatcgc cgtgacaaaa	· •	20
<210> 110 <211> 17 <212> DNA <213> Homo sapiens		
<400> 110 taccgggcag tgacgcc		17
<210> 111 <211> 16 <212> DNA <213> Homo sapiens		
<400> 111 gcggcctgtt gccgag		16
<210> 112 <211> 16 <212> DNA <213> Homo sapiens		
<400> 112 ccgggcgtcg gtggac		16
<210> 113 <211> 17 <212> DNA <213> Homo sapiens		
<400> 113 ggtggacagg gtgtgca		17
<210> 114 <211> 18 <212> DNA <213> Homo sapiens		
<400> 114 ggtggacaga gtgtgcag		18
<210> 115 <211> 19 <212> DNA		

WO 2005	/063985	540 / 752	PCT/JP2004/019763
<213>	Homo sapiens		
<400> tccaagc	115 cac atcaaagtc		. 19
<210><211><211><212><213>	16		N.
<400> ggggtgta	116 atc gggcgg		16
<210> <211> <212> <213>	16		
	117 agc geegag		16
<210> <211> <212> <213>	16		
<400> cggcctag	118 gcg ccgagt		. 16
<212>	119 16 DNA Homo sapiens	•	
<400> gcggcctg	119 gac geegag		16
<212>	120 16 DNA Homo sapiens		
	120 cg ccgagt		16
<212>	16		
<400> gcggcctg	121 at geegag		16

WO 2005/063985	541 / 752	PCT/JP2004/019763
<210> 122 <211> 16 <212> DNA <213> Homo sapiens		
<400> 122 cctggaggag gaccgg		16
<210> 123 <211> 17 <212> DNA <213> Homo sapiens	,	
<400> 123 gagaggaaac gggcggc		17
<210> 124 <211> 18 <212> DNA		
<213> Homo sapiens <400> 124 gcgtggagac gtctacac		18
<210> 125 <211> 17 <212> DNA		
<213> Homo sapiens <400> 125 tcggaatggc caggagg		17
<210> 126 <211> 16 <212> DNA		
<213> Homo sapiens <400> 126 getgeetgae geegag		16
<210> 127 <211> 17		
<212> DNA <213> Homo sapiens <400> 127		
cgacgtggag gtgtacc		17
<210> 128 <211> 16 <212> DNA <213> Homo sapiens		

WO 2005/063985	542 / 752	PCT/JP2004/019763
gccgcctgac gccgag		16
<210> 129 <211> 18 <212> DNA <213> Homo sapi	ens	•
<400> 129 gcatggagac gtctaca	c	18
<210> 130 <211> 18 <212> DNA <213> Homo sapi	ens	
<400> 130 gcctccagaa ccccatca		18
<210> 131 <211> 18 <212> DNA <213> Homo sapi	ens	
<400> 131 ggagtacgca cgcttcg:	a.	18
<210> 132 <211> 15 <212> DNA <213> Homo sapi	ens	
<400> 132 ccgcctgccg ccgag		15
<210> 133 <211> 17 <212> DNA <213> Homo sapa	ens	
<400> 133 gggcggagtt ggacacg	5	<b>17</b>
<210> 134 <211> 18 <212> DNA <213> Homo sap	ens	
<400> 134 accccatcat cgtggag	;	18
<210> 135 <211> 18 <212> DNA		

W O 200	15/003985	543 / 752	PC 1/JP2004
<213>	Homo sapiens		
<400> gcgtgc	135 gtct tgtgacca		18
<210>	136		
<211>	16		
	DNA		
<213>	Homo sapiens		9
<400>		•	
gctggg	gccg cctgac		16
ح0.10s	105		
<210><211>			
	DNA		
	Homo sapiens		
<400>	137		
	gagg acccgg		16
	•		
<210>	138		
<211>	16		
	DNA		
<213>	Homo sapiens		
<400>			
aacggg	gaccg agcgcg		16
010	100		
<210><211>			
	DNA		
<213>			
<400>	139	•	
	acac ggtgtgca		18
<210>	140		
<211>			
<212>			
<213>	Homo sapiens		
<400>	140		
ggaca	ecgta tgcagaca		18
	•		
<210>			
<211>			
<212>			
<213>	Homo sapiens		
<400>			
gtatcg	ggtg gtgacgc		17

WO 2005/063985

543 / 752 PCT/JP2004/019763

WO 2005/063985	544 / 752	PCT/JP2004/019763
<210> 142 <211> 19 <212> DNA <213> Homo sapiens		
<400> 142 cccagcatgc cgtgtctac	•	19
<210> 143 <211> 17 <212> DNA <213> Homo sapiens		
<400> 143 tccccagcat ggagacg	•	17
<210> 144 <211> 19 <212> DNA <213> Homo sapiens		
<400> 144 agaaggaaga cctggagag		19
<210> 145 <211> 16 <212> DNA <213> Homo sapiens		
<400> 145 gaccgagete gtgegg		16
<210> 146 <211> 16 <212> DNA <213> Homo sapiens		
<400> 146 gggggggctt gacgcc		16
<210> 147 <211> 18 <212> DNA <213> Homo sapiens		
<400> 147 cttcaccaat gggacgga		18
<210> 148 <211> 16 <212> DNA <213> Homo sapiens		
<400> 148		

WO 2005	/063985	545 / 752	PC	Г/ЈР2004/019763
geggtga	accc cgcagg.			16
<210> <211> <212> <213>	18			
<400> tgaccag	149 ggaa gagacagc		<b>3</b>	18
<210><211><211><212><213>	21	· · · · · · · · · · · · · · · · · · ·		
<400> tgtgacc	150 aga tacatctata a			21
<400> gcggga	151 tett geagagg			17
<210> <211> <212> <213>	19			
<400> tgactgg	152 act ttccagatc			19
<210><211><211><212><213>	19			
<400> gcgtcttg	153 gta accagacac			19
<210><211><211><212><213>	19			
<400>				19
<210> <211> <212>	17			

WO 2005/063985	546 / 752	PCT/JP2004/019763
<213> Homo sapiens		
<400> 155		
gtgtaccgcg cggtgac		17
<210> 156 <211> 16		
<212> DNA		
<213> Homo sapiens		<b>5</b>
<400> 156		10
ggagaggacc cgggcg		16
<210> 157		
<211> 16 <212> DNA		
<213> Homo sapiens		
<400> 157		
cgaggtgggg taccgc		16
<210> 158		
<211> 19 <212> DNA		
<212> DNA <213> Homo sapiens		
<400> 158		
gcgtcttgta accagatac		19
<210> 159		
<211> 22	•	
<212> DNA <213> Homo sapiens		
<400> 159		
tgtaaccaga tacatctata ac		22
<210> 160		•
<211> 16		
<212> DNA		
<213> Homo sapiens		
<400> 160 cggcctgtcg ccgagt		16
obboorbrob oceast		10
<210> 161		
<211> 16		
<212> DNA <213> Homo sapiens		
<400> 161		
ccgggcggag ttggac		16

WO 2005	5/063985	54	17 / 752		PCT/JP2004/019763
<210> <211> <212> <213>	16				
<400> ggtggcg	162 ttc cgcggg			•	16
<210> <211> <212> <213>	18 DNA			<b>v</b>	
<400> gatgccg	163 aga actggaac				. 18
<210><211><211><212><213>	15				
<400>					15
<210><211><211><212><213>	19				
<400> ggtgagg				÷	19
<210> <211> <212> <213>					
<400> tccttctg	166 gc tgttccagta ctc				23
<210> <211> <212> <213>	21				
<400> atgated	167 ctaa acaaagctct g				21
<210> <211> <212> <213>					

tgtgctactt caccaacggg acg

23

60

120

240

300

480

660

768

240

300

<210> 169

<211> 768

<212> DNA

<213> Homo sapiens

#### <400> 169

atgatectaa acaaagetet getgetgggg geeetegete tgaccacegt gatgageeee tgtggaggtg aagacattgt ggctgaccac gttgcctctt gtggtgtaaa cttgtaccag 180 ttttacggtc cctctggcca gtacacccat gaatttgatg gagatgagga gttctacgtg gacctggaga ggaaggagac tgcctggcgg tggcctgagt tcagcaaatt tggaggtttt gacccgcagg gtgcactgag aaacatggct gtggcaaaac acaacttgaa catcatgatt 360 aaacgctaca actctaccgc tgctaccaat gaggttcctg aggtcacagt gttttccaag 420 tetecegtga caetgggtea geceaacace etcatttgte ttgtggacaa eatettteet cctgtggtca acatcacatg gctgagcaat gggcagtcag tcacagaagg tgtttctgag accagettee tetecaagag tgateattee ttetteaaga teagttacet eacetteete 540 600 cettetgetg atgagattta tgactgeaag gtggageaet ggggcetgga ceageetett ctgaaacact gggagcctga gattccagcc cctatgtcag agctcacaga gactgtggtc 720 tgcgccctgg ggttgtctgt gggcctcgtg ggcattgtgg tgggcactgt cttcatcatc caaggeetge gtteagttgg tgetteeaga caccaaggge cattgtga

<210> 170

<211> 768

<212> DNA

<213> Homo sapiens

170atgatectaa acaaagetet getgetgggg geeetegete tgaceaeegt gatgageeee 60 tgtggaggtg aagacattgt ggctgaccac gttgcctctt gtggtgtaaa cttgtaccag 120 180 ttttacggtc cctctggcca gtacacccat gaatttgatg gagatgagga gttctacgtg 240 gacctggaga ggaaggagac tgcctggcgg tggcctgagt tcagcaaatt tggaggtttt gaccegcagg gtgcactgag aaacatggct gtggcaaaac acaacttgaa catcatgatt 300 aaacgctaca actetacege tgetaceaat gaggtteetg aggteacagt gttttecaag 360 tetecegtga caetgggtea geceaacaee eteatttgte ttgtggacaa eatettteet 420 480 cetgtggtca acateacatg getgageaat gggeagteag teacagaagg tgtttetgag 540 accagettee tetecaagag tgateattee ttetteaaga teagttacet cacetteete cettetgetg atgagattta tgactgeaag gtggageact ggggeetgga ceageetett 600 660 ctgaaacact gggagcctga gattccagcc cctatgtcag agctcacaga gactgtggtc tgcgccctgg ggttgtctgt gggcctcgtg ggcattgtgg tgggcactgt cttcatcatc 720 caaggeetge gtteagttgg tgetteeaga caecagggge cattgtga 768

<210> 171

<211> 768

<212> DNA

Homo sapiens <213>

# <400> 171

atgatectaa acaaagetet getgetgggg geeetegete tgaceaeegt gatgageeee 60 tgtggaggtg aagacattgt ggctgaccac gttgcctctt gtggtgtaaa cttgtaccag 120 ttttacggtc cctctggcca gtacacccat gaatttgatg gagatgagca gttctacgtg 180 gacctggaga ggaaggagac tgcctggcgg tggcctgagt tcagcaaatt tggaggtttt gacccgcagg gtgcactgag aaacatggct gtggcaaaac acaacttgaa catcatgatt 360 aaacgctaca actctaccgc tgctaccaat gaggttcctg aggtcacagt gttttccaag 420 tetecegtga eactgggtea geccaacace eteatttgte ttgtggacaa eatettteet 480 cctgtggtca acatcacatg gctgagcaat gggcagtcag tcacagaagg tgtttctgag 540 accagettee tetecaagag tgateattee ttetteaaga teagttacet cacetteete cettetgetg atgagattta tgactgcaag gtggagcact ggggcetgga ceagcetett 600

ctgaaacact gggagcctga gattccagcc cctatgtcag agctcacaga gactgtggtc tgtgccctgg ggttgtctgt gggcctcatg ggcattgtgg tgggcactgt cttcatcatc caaggcctgc gttcagttgg tgcttccaga caccaagggc cattgtga	660 720 768
<210> 172 <211> 768 <212> DNA <213> Homo sapiens	
cctgtggtca acatcacatg gctgagcaat gggcagtcag tcacagaagg tgtttctgag accagcttcc tctccaagag tgatcattcc ttcttcaaga tcagttacct caccttcctc 54 ccttctgctg atgagattta tgactgcaag gtggagcact ggggcctgga ccagcctctt ctgaaacact gggagcctga gattccagcc cctatgtcag agctcacaga gactgtggtc	60 120 180 240 300 360 20 480 40 600 660 720 768
gacctggaga agaaggagac tgcctggcgg tggcctgagt tcagcaaatt tggaggtttt gacccgcagg gtgcactgag aaacatggct gtggcaaaac acaacttgaa catcatgatt aaacgctaca actctaccgc tgctaccaat gaggttcctg aggtcacagt gttttccaag	60 120 180 240 300 360
cctgtggtca acatcacatg gctgagcaat gggcacgcag tcacagaagg tgtttctgag accagcttce tctccaagag tgatcattce ttcttcaaga tcagttacet caccttcete 54 ccttctgctg atgagattta tgactgcaag gtggagcact ggggcctgga ccagcctctt ctgaaacact gggagcctga gattccagce cctatgtcag agctcacaga gactgtggtc	20 480 10 600 660 20 768
<210> 174 <211> 768 <212> DNA <213> Homo sapiens	
ttttacggtc cctctggcca gtacacccat gaatttgatg gagatgagga gttctacgtg gacctggaga ggaaggagac tgcctggcgg tggcctgagt tcagcaaatt tggaggtttt gacccgcagg gtgcactgag aaacatggct gtggcaaaac acaacttgaa catcatgatt	60 120 180 240 300 360

cctgtggtca acatcacatg gctgagcaat gggcagtcag tcacagaagg tgtttctgag 480 accagcttee tetecaagag tgatcattee ttettcaaga tcagttacet cacetteete 540 ccttetgetg atgagattta tgactgcaag gtggagcact ggggcetgga ccagcetett 600 ctgaaacact gggagcetga gattccagee cctatgtcag agetcacaga gactgtggte 660 tgcaccetgg ggttgtetgt gggcetegt ggcattgtgg tgggacatgt etteateate 720 caaggeetge gttcagttgg tgettccaga caccaaggge cattgtga 768
<210> 175 <211> 613 <212> DNA <213> Homo sapiens
<400> 175 atgatectaa acaaagetet getgetgggg geeetegete tgaceaceat gatgageeet tgtggaggtg aaggeattgt ggetgaceae gttgeetett gtggtgtaaa ettgtaceag 120 ttttaceggte eetetggeea gtacaceeat gaatttgatg gagatgagga gttetaegtg 180 gacetggaga ggaaggagae tgeetggegg tggeetgagt teageaaatt tggaggtttt 240 gaceegeagg gtgeactgag aaacatgget gtggeaaaae acaacttgaa eateatgatt 300 aaaegetaca actetacege tgetaceaat gaggtteetg aggteacagt gttteeaag 160 teteeegtga eaetgggtea geecaacae eteatttgte ttgtggacaa eatetteet 420 eetgtggtea acateacetg getgageaat gggeagteag teacagaagg tgtttetgag accagettee tetecaagag tgateattee ttetteaaga teagttaeet eaetteete 540 eettetegetg atgagattta tgactgeaag gtggageaet ggggeetgga ceageetett 600 etgaaacact ggg 613
<210> 176 <211> 750 <212> DNA <213> Homo sapiens
<400> 176 atgatectaa acaaagetet getgetgggg geeetegete tgaceaceat gatgageeee 60 tgtggaggtg aaggeattgt ggetgaceae gttgeetett gtggtgtaaa ettgtaceag 120 ttttacggte eetetggeea gtacaceat gaatttgatg gagatgagga gttetacgtg 180 gacetggaga ggaaggagae tgeetgggg tggeetgagt teageaaatt tggaggtttt 240 gaceegeagg gtgeaetgag aaacatgget gtggeaaaae acaaettgaa eateatgatt 300 aaaegetaea actetacege tgetaceaat gaggtteetg aggteacagt gtttteeaag 360 tetecegtga eactgggtea geeaaeaee eteatttgte ttgtggacaa eatettteet 420 eetgtggtea acateacatg getgageaat gggeagteag teacagaagg tgtttetgag aceagettee tetecaagag tgateattee ttetteaaga teagttacet eacetteete 540 eettetgetg atgagattta tgaetgeaag gtggageaet ggggeetgga eeageetett 600 eetgaaacaet gggageetga gatteeage eetatgteag ageteacaga gaetgtggte 660 tgegeeetgg ggttgtetgt gggeetegtg ggeattgtgg tgggeactgt etteateate 720 eaaggeetge gtteagttgg tgetteeaga 750
<210> 177 <211> 249 <212> DNA <213> Homo sapiens
<400> 177 ctgaccacgt tgcctcttgt ggtgtaaact tgtaccagtt ttacggtccc tctggccagt acacccatga atttgatgga gatgagcagt tctacgtgga cctggagagg aaggaggctg acctggggtg gcctgagttc agcaaatttg gaggttttga cccgcagggt gcactgagaa acatggctgt ggcaaaacac aacttgaaca tcatgattaa acgctacaac tctaccgctg 240 ctaccaatg 249

240

300 360

480

600

720 765

660

60 120

180

240

300

480

600 660

720

768

60

120

180

240

300

480

600

720

660

540

360 420

360

180

<210>	178
<211>	765
<212>	DNA
<213>	Homo sapiens

### <400> 178

atgatectaa acaaagetet gatgetgggg geeetegeee tgaceaeegt gatgageeet tgtggaggtg aagacattgt ggctgaccac gttgcctctt acggtgtaaa cttgtaccag tettaeggte cetetggeea gtteacceat gaatttgatg gagaegagga gttetatgtg gacctggaga ggaaggagac tgtctggaag ttgcctctgt tccacagact tagatttgac ccgcaatttg cactgacaaa catcgctgtg ctaaaacata acttgaacat cctgattaaa cgctccaact ctaccgctgc taccaatgag gttcctgagg tcacagtgtt ttccaagtct 420 cccgtgacac tgggtcagcc caacaccctc atctgtcttg tggacaacat ctttcctcct gtggtcaaca tcacctggct gagcaatggg cactcagtca cagaaggtgt ttctgagacc 540 agetteetet eeaagagtga teatteette tteaagatea gttaceteae etteeteeet tctgctgatg agatttatga ctgcaaggtg gagcactggg gcctggatga gcctcttctg aaacactggg agcctgagat tccagcacct atgtcagagc tcacagagac tgtggtctgt gccctggggt tgtctgtggg cctcgtgggc attgtggtgg ggaccgtctt gatcatccga ggcctgcgtt cagttggtgc ttccagacac caagggccct tgtga

<210> 179 <211> 768 <212> DNA

<213> Homo sapiens

### <400> 179

atgatectaa acaaagetet gatgetgggg geeetegeee tgaceaeegt gatgageeet tgtggaggtg aagacattgt ggctgaccat gttgcctctt acggtgtaaa cttgtaccag tettatggte eetetggea gtacagecat gaatttgatg gagacgagga gttetatgtg gacctggaga ggaaggagac tgtctggcag ttgcctctgt tccgcagatt tagaagattt gacccgcaat ttgcactgac aaacatcgct gtgctaaaac ataacttgaa catcgtgatt aaacgeteea actetacege tgetaceaat gaggtteetg aggteacagt gtttteeaag 420 tetecegtga caetgggtea geceaacace etcatetgte ttgtggacaa catettteet cctgtggtca acatcacctg gctgagcaat gggcactcag tcacagaagg tgtttctgag accagettee tetecaagag tgateattee ttetteaaga teagttacet eacetteete 540 cettetgetg atgagattta tgactgcaag gtggagcact ggggcctgga tgagcetett ctgaaacact gggagcctga gattccaaca cctatgtcag agctcacaga gactgtggtc tgcgccctgg ggttgtctgt gggcctcgtg ggcattgtgg tggggaccgt cttgatcatc cgaggcctgc gttcagttgg tgcttccaga caccaagggc ccttgtga

<210> 180 <211> 768 <212> DNA <213> Homo sapiens

### <400> 180

atgatectaa acaaagetet gatgetgggg geeetegeee tgaceaeegt gacgageeet tgtggaggtg aagacattgt ggctgaccat gttgcctctt acggtgtaaa cttgtaccag tettatggte cetetgggea gtacagecat gaatttgatg gagacgagga gttetatgtg gacctggaga ggaaggagac tgtctggcag ttgcctctgt tccgcagatt tagaagattt gacccgcaat ttgcactgac aaacatcgct gtgctaaaac ataacttgaa catcgtgatt aaacgeteea aetetacege tgetaceaat gaggtteetg aggteacagt gttttecaag tetecegtga eactgggtea geceaacace etcatetgte ttgtggacaa eatettteet cctgtggtca acatcacctg gctgagcaat gggcactcag tcacagaagg tgtttctgag accagettee tetecaagag tgateattee ttetteaaga teagttacet eacetteete ccttctgatg atgagattta tgactgcaag gtggagcact ggggcctgga tgagcctctt ctgaaacact gggageetga gattecaaca cetatgteag ageteacaga gactgtggte tgcgccctgg ggttgtctgt gggcctcgtg ggcattgtgg tggggaccgt cttgatcatc

cgaggcetge gttcagttgg tgcttccaga caccaagggc ccttgtga	768
<210> 181 <211> 768 <212> DNA <213> Homo sapiens	
atgatectaa acaaagetet gatgetgggg geeetegeee tgaceaeegt gatgageeet tgtggaggtg aagacattgt ggetgaceat gttgeetett aeggtgtaaa ettgtaceag tettatggte eetetgggea gtacageat gaatttgatg gagacgagga gttetatgtg gaeetggaga ggaaggagae tgtetggeag ttgeetetgt teegeagatt tagaagattt gaeeegeaat ttgeaetgae aaacateget gtgetaaaae ataaettgaa eategtgatt aaaegeteea aetetaeege tgetaceaat gaggteetg aggteaeagt gtttteeaag teteeegtga eaetgggtea geeeaacaee eteatetget ttgtggacaa eatettteet eetgtggtea acateaeetg getgageaat gggeaeteag teacagaagg tgtttetgag aceagettee teteeaaga tgateattee ttetteaaga teagttaeet eaeetteete eettetgatg atgagattta tgaetgeaag gtggageaet ggggeetgga tgageetett etgaaacaet gggageetga gatteeaaea eetatgteag ageteaeaga gaetgtggte tgegeeetgg ggttgetgt gggeetegt gggaeetgt gtgggaeegt ettgateate egaggeetge gtteagttgg tgetteeaga eaeeaaggge eettgtga	60 120 180 240 300 360 420 480 540 600 660 720 768
<210> 182 <211> 765 <212> DNA <213> Homo sapiens <400> 182 atgatectaa acaaagetet getgetgggg gecettgeee tgaceaeegt gatgageeee	60
gtggtcaaca tcacatggct gagcaatggg cactcagtca cagaaggtgt ttctgagacc agcttcctct ccaagagtga tcattccttc ttcaagatca gttacctcac cttcctccct tctgctgatg agatttatga ctgcaaggtg gagcactggg gcctggacga gcctcttctg aaacactggg agcctgagat tccagcccct atgtcagagc tcacagagac tgtggtctgc	120 180 240 300 360 420 480 640 600 660
gccctgggat tgtctgtggg cctcgtgggc attgtggtgg gcactgtctt catcatccga ggcctgcgtt cagttggtgc ttccagacac caagggccct tgtga  <210> 183 <211> 528 <212> DNA <213> Homo sapiens	720 765
gcaatgggca ctcagtcaca gaaggtgttt ctgagaccag cttcctctcc aagagtgatc	60 120 180 240 300 360 420 30 528

1000, 102	
<010× 104	
<210> 184	
<211> 765	
<212> DNA	
<213> Homo sapiens	
,	
<400> 184	
	60
tgtggaggtg aagacattgt ggctgaccac gtcgcctctt atggtgtaaa cttgtaccag 1	.20
	80
	240
	300
cgctccaact ctaccgctgc taccaatgag gttcctgagg tcacagtgtt ttccaagtct 36	0
cccgtgacac tgggtcagcc caacatecte atetgtettg tggacaacat ettteeteet 420	)
gtggtcaaca tcacatggct gagcaatggg cactcagtca cagaaggtgt ttctgagacc	480
agetteetet eeaagagtga teatteette tteaagatea gttaceteae eeteeteet 540	
tetgetgagg agagttatga etgeaaggtg gageaetggg geetggaeaa geetettetg	600
aaacactggg agcetgagat tecageceet atgteagage teacagagae tgtggtetge	660
gccctgggat tgtctgtggg cctcgtgggc attgtggtgg gcactgtctt catcatccga 72	0
	765
<210> 185	
<211> 258	
<212> DNA	
<213> Homo sapiens	
<400> 185	
gaagacattg tggctgacca cgttgcctct tatggtgtaa acttgtacca gtcttacggt 6	0
	20
aggaaggaga ctgtctggtg tttgcctgtt ctcagacaat ttagatttga cccgcaattt 18	
	240
tctaccgctg ctaccaat	258
•	
<210> 186	
<211> 222	
<212> DNA	
<213> Homo sapiens	
•	
<400> 186	
ggtgtaaact tgtaccagtc ttacggtccc tctggccagt acacccatga atttgatgga 6	0
	20
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	.80
	22
<210> 187	
<211> 765	
<212> DNA	
<213> Homo sapiens	
<400> 187	
	30
	20
tettaeggte cetetggeea gtacacceat gaatttgatg gagatgagea gttetaegtg 18	
	40
	40 00
	•
gtggtcaaca tcacatggct gagcaatggg cactcagtca cagaaggtgt ttctgagacc	180

agetteetet eeaagagtga teatteette tteaagatea gttaceteae eeteeteet 540 tettetgagg agagttatga etgeaaggtg gageaetggg geetggacaa geetettetg 600 aaacaetggg ageetgagat teeageeeet atgteagage teacagagae tgtggtetge 660 geeetgggat tgtetgtggg eetegtggge attgtggtgg geaetgtett eateateega 720 ggeetgegtt eagttggtge tteeagacae eaagggeeet tgtga 765	
<210> 188 <211> 246 <212> DNA <213> Homo sapiens	
<400> 188 ctgaccacgt cgcctcttat ggtgtaaact tgtaccagtc ttacggtctc tctggccagt acacccatga atttgatgga gatgagcagt tctacgtgga cctggggagg aaggaggactg tctggtgttt gcctgttctc agacaattta gatttgaccc gcaatttgca ctgacaaaca 180 tcgctgtcct aaaacataac ttgaacagtc tgattaaacg ctccaactct accgctgcta 240 ccaatg 246	
<210> 189 <211> 765 <212> DNA <213> Homo sapiens	
atgatectaa acaaagetet gatgetgggg accettgece tgaceacegt gatgageece 60 tgtggaggtg aagacattgt ggetgaceac gtegeetett atggtgtaaa ettgtaecag 120 tettaeggte eetetggeea gtacaeceat gaatttgatg gagatgagea gttetaegtg 180 gacetgggga ggaaggagac tgtetggtgt ttgeetgte teagacaatt tagatttgae 240 eegeaatttg eactgacaaa eategetgte etaaaacata aettgaacag tetgattaaa 300 egeteeaact etaeegetge taeeaatgag gtteetgagg teacagtgtt tteeaagtet 360 eeegtgacac tgggteagee eaacateete atetgtettg tggacaacat ettteeteet 420 gtggteaaca teacatgget gageaatggg eacteagtea eagaaggtgt ttetgagace 480 agetteetet eeaagagtga teatteette tteaagatea gttaeeteae eeteeteet 540 tetgetgagg agagttatga etgeaaggtg gageaetggg gaetggacaa geetettetg 600 aaacaetggg ageetggaat teeageeeet atgteagage teacagagae tgtggtetge 660 geeetggggt tgtetgtggg eetegtgge attgtggtgg geaetgtett eateateega 720 ggeetgegtt eagttggtge tteeagaeac eaagggeeet tgtga 765	
<210> 190 <211> 765 <212> DNA <213> Homo sapiens	
<400> 190atgatcetaa acaaagetet getgetgggg geeettgeee tgaccaeegt gatgageeee tgtggaggtg aagacattgt ggetgaccat gttgeetett atggtgtaaa ettgtaccag 120 tettacggte eetetggeea gtteaceeat gaatttgatg gagacgagea gttetacgtg 180 gacctgggga ggaaggagae tgtetggtgt ttgeetgtte teagacaatt tagatttgae 240 eegeaatttg eaetgacaaa eategetgtg acaaaacaa aettgaacat eetgataaa 300 egetecaaaet etaccgetge taccaatgag gtteetgagg teacagtgtt tteeaagtet 360 eeegtgacge tgggteagee eaacaeeete atetgtettg tggacaacat ettteeteet 420 gtggteaaca teacatgget gagcaatggg eaetcagtea eagaaggtgt ttetgagaee 480 agetteetet eeaagagtga teatteette tteaagatea gttaceteae etteeteet 540 tetgetgatg agatttatga etgeaaggtg gagcaetggg geetggaega geetettetg 600 aaacaetggg ageetgagat teeageeeet atgteagage teacagagae tgtggtetge 660 geeetgggat tgtetgtgg eetegtggge attgtggtgg geaetgtett eateateega 720 ggeetgeett eagttggtge tteeagacae eaagggeeet tgtga	60

<210> <211> <212> <213> <400>	191 227 DNA Homo sapiens	
ggtgtaa gacgago agacaat	act tgtaccagtc ttacggtccc tctggccagt tcacccatga atttgatgga eagt tctacgtgga cctggggagg aaggagactg tctggtgttt gcctgttctc etta gatttgaccc gcaatttgca ctgacaaaca tcgccgtgac aaaacacaac tcc tgattaaacg ctccaactct accgctgcta ccaatga	60 120 180 227
<210>	192	
<211>	529	
<212>	DNA	
<213>	Homo sapiens	
<400>	192	
gggcctgr taaccga gcagggg ggcgtcgr gaggaga caacctgo tcggaate ctggaco	tgc tacttcacca acgggacgga gcgctgcgg ggtgtgacca gacacatcta gag gagtacgtgc gcttcgacag cgacgtgggg gtgtaccggg cagtgacgcc cgg cctgttgccg agtactggaa cagccagaag gaagtcctgg agggggcccg gtg gacagggtg gcagacacaa ctacgaggtg gcgtaccgcg ggatcctgca agtg gagccacag tgaccatctc cccatccagg acagaggccc tcaaccacca ctg atctgctcgg tgacagattt ctatccaagc cagatcaaag tccggtggtt gat caggaggaga cagccggcgt tgtgtccacc ccctcatta ggaacggtga ctc cagatcctgg tgatgctgga aatgactcc cagegtggag atgtctacac gtg gagcaccca gcctccagag ccccatcacc gtggagttgg	60 120 180 240 300 360 420 480 529
<210>	193	
<211>	244	
<212>	DNA	
<213>	Homo sapiens	
<400>	193	
	gc tacttcacca acgggacgga gcgcgtgcgg ggtgtgacca gacacatcta	60
	gag gagtacgtgc gcttcgacag cgacgtgggg gtgtaccggg cggtgacgcc	120
	cgg cctgttgccg agtactggaa cagccagaag gaagtcctgg agggggcccg	180
gagg	gtg gacagagtgt gcagacacaa ctacgaggtg gcgtaccgcg ggatcctgca	240 244
<210>	194	
<211>	529	
<212>	DNA	
<213>	Homo sapiens	
<400>	194	
	gc tacttcacca acgggacgga gcgcgtgcgg ggtgtgacca gacacatcta	60
taaccga	gag gagtacgtgc gettegacag egaegtgggg gtgtaceggg eggtgaegee	120
gcagggg	cgg cctagcgccg agtactggaa cagccagaag gaagtcctgg agggggcccg	180
	gtg gacagagtgt gcagacacaa ctacgaggtg gcgtaccgcg ggatcctgca	240
caacetor	gtg gagcccacag tgaccatctc cccatccagg acagaggccc tcaaccacca tg atctgctcgg tgacagattt ctatccaagc cacatcaaag tccggtggtt	300 3 <b>6</b> 0
tcggaats	gat caggaggaga cagceggegt tgtgtecace ecceteatta ggaaeggtga	420
ctggacct	tc cagateetgg tgatgetgga aatgacteee cagegtggag atgtetacae	480
	tg gagcacccca gcctccagag ccccatcacc gtggagtgg	529

	·	
<210>	195	
<211>	245	
<212>		
<213>	Homo sapiens	
	220-20 24-10-10	*
<400>	195	
	tgc tacttcacca acgggacgga gcgcgtgcgg ggtgtgacca gacacatcta	60
taaccga	agag gagtacgtgc gcttcgacag cgacgtgggg gtgtatcggg cggtgacgcc	120
gcaggg	gegg cetagegeeg agtactggaa cagecagaag gaagteetgg agggggeeeg	180
ggcgtcg	ggtg gacagagtgt gcagacacaa ctacgaggtg gcgtaccgcg ggatcctgca	240
gagga		245
<210>	196	
<211>	529	
<212>	DNA	
<213>	Homo sapiens	
<400>	196	
gggcctg	tgc tacttcacca acgggacgga gcgcgtgcgg ggtgtgacca gacacatcta	60
taaccga	gag gagtacgtgc gcttcgacag cgacgtgggg gtgtatcggg cggtgacgcc	120
	gegg cetgaegeeg agtaetggaa cagecagaag gaagteetgg agggggeeeg	180
ggcgtcg	gtg gacagagtgt gcagacacaa ctacgaggtg gcgtaccgcg ggatcctgca	240
gaggag	agtg gagcccacag tgaccatete eccatecagg acagaggeee teaaccacca	300
caacctg		360
tcggaat	gat caggaggaga cagccggcgt tgtgtccacc cccctcatta ggaacggtga	420
ctggacc	ttc cagateetgg tgatgetgga aatgacteec cagegtggag atgtetacae	480
ctgccac	gtg gagcacccca gcctccagag ccccatcacc gtggagtgg	529
z010s	107	
<210>	197	
<211>	148	
<212>	DNA	
<213>	Homo sapiens	
<400>	197	
	gege gtgeggggtg tgaccagaea catetataae egagaggagt aegtgegett	60
CESCSE	gac gtgggggtgt atcgggcggt gacgccgcag gggcggcctg atgccgagta	120
	age cagaaggaag teetggag	148
	age saganggang soosggag	140
<210>	198	
<211>	212	
<212>		
<213>	Homo sapiens	
	-	
<400>	198	
gggcctg	tgc tacttcacca acgggacgga gcgcgtgcgg ggtgtgacca gatacatcta	60
taaccga	gaa gagtacgtgc gcttcgacag cgacgtgggg gtgtaccggg cggtgacgcc	120
gcagggg	cgg cctagcgccg agtactggaa cagccagaag gacatcctgg aggaggaccg	180
	gtg gacagggtgt gcagacacaa ct	212
<210>	199	
<211>	529	
<212>		
<213>	Homo sapiens	
. 400	100	
<400>	199	
gggcatg	tgc tacttcacca acgggacaga gcgcgtgcgt cttgtgagca gaagcatcta	ഗ

taaccgagaa gagatcgtgc gcttcgacag cgacgtgggg gagttccggg cggtgacgct gctggggctg cctgccgccg agtactggaa cagccagaag gacatcctgg agaggaaacg ggcggcggtg gacagggtgt gcagacacaa ctaccagttg gagctccgca cgaccttgca gcggcgagtg gagcccacag tgaccatctc cccatccagg acagaggccc tcaaccacca caacctgctg gtctgctcgg tgacagattt ctatccagcc cagatcaaag tccggtggtt tcggaatgac caggaggaga cagctggcgt tgtgtccacc ccccttatta ggaatggtga ctggaccttc cagatcctgg tgatgctgga aatgactccc cagcgtggag acgtetacac ctgccacgtg gagcacccca gcctccagag ccccatcacc gtggagttgg	120 180 240 300 360 420 480 529

<210> 200

<211> 529

<212> DNA

<213> Homo sapiens

200gggcatgtgc tacttcacca acgggacaga gcgcgtgcgt cttgtgagca gaagcatcta 60 taaccgagaa gagatcgtgc gettegacag cgacgtgggg gagtteeggg eggtgacget 120 180 getggggetg cetgeegeeg agtactggaa cageeagaag gacateetgg agaggaaaeg 240 ggcggcggtg gacagggtgt gcagacacaa ctaccagttg gagctccgca cgaccttgca 300 geggegagtg gageceacag tgaceatete eccatecagg acagaggeee teaaceacea 360 caacctgctg gtctgctcgg tgacagattt ctatccagcc cagatcaaag tccggtggtt 420 teggaatgge caggaggaga cagetggegt tgtgtccacc cccettatta ggaatggtga 480 ctggaccttc cagatcctgg tgatgctgga aatgactccc cagcgtggag acgtctacac 529 ctgccacgtg gagcacccca gcctccagag ccccatcacc gtggagtgg

<210> 201

<211> 449

<212> DNA

<213> Homo sapiens

<400> 201

60 gggcatgtgc tacttcacca acgggacaga gcgcgtgcgt cttgtgagca gaagcatcta taaccgagaa gagatcgtgc gcttcgacag cgacgtgggg gagttccggg cggtgacgct 120 gctggggetg cctgacgccg agtactggaa cagccagaag gacatcctgg agaggaaacg 180 240 ggcggcggtg gacagggtgt gcagacacaa ctaccagttg gagctccgca cgaccttgca geggegacce catecaggae agaggeeete aaceaceaca acetgetggt etgeteggtg 300 360 acagatttct atccagccca gatcaaagtc cggtggtttc ggaatggcca ggaggagaca 420 getggegttg tgtccacccc cettattagg aatggtgact ggacettcca gateetggtg 449 atgctggaaa tgactcccca gcgtggaga

202 <210>

529 <211>

<212> DNA

Homo sapiens <213>

<400> 202

60 ggccatgtgc tacttcacca acgggacgga gcgcgtgcgt tatgtgacca gatacatcta 120 taaccgagag gagtacgcac gcttcgacag cgacgtggag gtgtaccggg cggtgacgcc getggggeeg cetgaegeeg agtaetggaa eageeagaag gaagteetgg agaggaeeeg 240 ggcggagttg gacacggtgt gcagacacaa ctaccagttg gagctccgca cgaccttgca 300 geggegagtg gageceacag tgaceatete eccatecagg acagaggece teaaceacea 360 caacetgetg gtetgeteag tgacagattt ctatecagee cagateaaag teeggtggtt teggaatgae caggaggaga caaceggegt tgtgteeace eccettatta ggaacggtga 420 480 ctggaccttc cagatectgg tgatgctgga aatgacteec cageatggag aegtetaeae 529 ctgccacgtg gagcacccca gcctccagaa ccccatcacc gtggagtgg

<211> 248 <212> DNA <213> Homo sapiens <400> 203 ggccatgtgc tacttcacca acgggacgga gcgcgtgcgt tatgtgacca gatacatcta taaccgagag gagtacgcg gcttcgacag cgacgtggag gtgtaccggg cggtgacgcc gctgggggccg cctgacgcc agtactggaa cagccagaag gaagtcctgg agaggacccg ggcggagttg gacacggtgt gcagacacaa ctaccagttg gagctccgca cgaccttgca gcggcgag 248
<210> 204 <211> 529 <212> DNA <213> Homo sapiens
<ul> <li>&lt;400&gt; 204</li> <li>gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtgacca gatacatcta</li> <li>taaccgagag gagtacgcac gcttcgacag cgacgtgggg gtgtatcggg cggtgacgcc</li> <li>gctggggccg cctgccgccg agtactggaa cagccagaag gaagtcctgg agaggacccg</li> <li>ggcggagttg gacacggtgt gcagacacaa ctaccagttg gagctccgca cgaccttgca</li> <li>gcggcgagtg gagcccacag tgaccatctc cccatccagg acagaggccc tcaaccacca</li> <li>gcggcagtg gtctgctcag tgacagattt ctatccagcc cagatcaaag tccggtggtt</li> <li>tcggaatgac caggaggaga caactggcgt tgtgtccacc cccttatta ggaacggtga</li> <li>ctggaccttc cagatcctgg tgatgctga aatgactccc cagcgtgag acgtctacac</li> <li>ctgcacgtg gagcaccca gcctccagaa cccatcatc gtggagtgg</li> <li>529</li> </ul>
<210> 205 <211> 529 <212> DNA <213> Homo sapiens
<400> 205 gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtgacca gatacatcta 60 taaccgagag gagtacgcac gcttcgacag cgacgtgggg gtgtatcggg cggtgacgcc 120 gctggggccg cctgacgccg agtactggaa cagccagaag gaagtcctgg agaggacccg 180 ggcggagttg gacacggtgt gcagacacaa ctaccagttg gagctccgca cgaccttgca 240 gcggcgagtg gagcccacag tgaccatete cccatccagg acagaggcce tcaaccacca 300 caacctgctg gtctgctcag tgacagattt ctatccagce cagatcaaag tccggtggtt 360 tcggaatgac caggaggag caactggcgt tgtgtccace cccttatta ggaacggtga 420 ctggacette cagatcctgg tgatgctgga aatgactece cagcgtgag acgtctacac 480 ctgccacgtg gagcacccca gcctcagaa ccccatcatc gtggagtgg 529
<210> 206 <211> 248 <212> DNA <213> Homo sapiens
<400> 206 gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtgacca gatacatcta taaccgagag gagtacgcgc gcttcgacag cgacgtgggg gtgtatcggg cggtgacgcc gctggggccg cctgacgccg agtactggaa cagccagaag gaagtcctgg agaggacccg ggcggagttg gacacggtgt gcagacacaa ctaccagttg gagctccgca cgaccttgca gcggcgag 248

	·		
<211>	529		
<212> <213>	DNA Homo sapiens		
<400>			
ggccat	gtgc tacttcacca acgggacgga gcgcgtgcgt tatgtgacca gatacatcta	60	
taaccga	agag gagtacgcac gettegacag egacgtggag gtgtaceggg eggtgacgce	120	
gctggg	gccg cetgeegceg agtactggaa cagecagaag gaagteetgg agaggaceeg	180	
ggcgga	gttg gacacggtgt gcagacacaa ctaccagttg gagctccgca cgaccttgca	240	
gcggcg	agtg gagcccacag tgaccatctc cccatccagg acagaggccc tcaaccacca	300	
caacctg	getg gtetgeteag tgacagattt ctatecagee cagateaaag teeggtggtt	360	
tcggaat	tgac caggaggaga caaccggcgt tgtgtccacc ccccttatta ggaacggtga	420	
ctggaco	ette cagateetgg tgatgetgga aatgacteec cageatggag aegtetacae	480	
ctgccac	gtg gagcacccca gcctccagaa ccccatcacc gtggagtgg	529	
	o o o o o o o o o o o o o o o o o o o	040	
<210>	208	•	
<211>	529		
<212>	DNA		
<213>	Homo sapiens		
<400>	208		
	gtgc tacttcacca acgggaccga gcgcgtgcgg ggtgtgacca gatacatcta	60	
taaccga	gag gagtacgcgc gcttcgacag cgacgtgggg gtgtatcggg cggtgacgcc	120	
gctgggg	seeg cetgeegeeg agtactggaa cageeagaag gaagteetgg agaggaeeg	180	
ggcggag	gttg gacacggtgt gcagacacaa ctaccagttg gagctccgca cgaccttgca	240	
gcggcga	agtg gagcccacag tgaccatcte eccatecagg acagaggeee teaaccaca	300	
caacctg		360 360	
tcggaat	gac caggaggaga caactggcgt tgtgtccacc cccttatta ggaacggtga	420	
ctggacc	ttc cagatectgg tgatgetgga aatgacteee cagegtggag aegtetacae		
ctgccac	gtg gagcacccca gcctccagaa ccccatcatc gtggagtgg	480	
	ses susseed socioodsad coccatoato sissastiss	529	
<210>	209		
<211>	248		
<212>	DNA		
<213>	Homo sapiens		
<400>	209		
	tgc tacttcacca acgggacgga gcgcgtgcgg ggtgtgacca gatacatcta	60	
taaccga	gag gagtacgcgc gcttcgacag cgacgtgggg gtgtatcggg cggtgacgcc	120	
gctgggg	ccg cctgccgccg agtactggaa cagccagaag gaagtcctgg agaggacccg	180	
ggcggag	ttg gacacggtgt gcagacacaa ctaccagttg gagctccgca cgaccttgca	240	
gcggcga	g	240	
0 00 0		240	•
<210>	210		
<211>	248		
	DNA		
	Homo sapiens		
	•		
<400>	210gggcatgtgc tacttcacca acgggacgga gegegtgegt ettgtgacca ga	tacatcta	60
taaccgag	gag gagtacgcac gettegacag egaegtgggg gtgtateggg eggtgaegee	120	
gctgggg	ccg cctgacgccg agtactggaa tagccagaag gacatcctgg aggaggaccg	180	
Racarcas	greg gacaccetat gcagacacaa ctaccagttg gagctccgca cgaccttgca	240	
gcggcga		248	
<210>	211		

DNA <212>

<213> Homo sapiens

<400>

gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtgacca gatacatcta taaccgagag gagtacgcac gettegacag egacgtgggg gtgtateggg tggtgacgee gctggggccg cctgccgccg agtactggaa cagccagaag gaagtcctgg agaggacccg ggcggagttg gacacggtgt gcagacacaa ctaccagttg gagctccgca cgaccttgca gcggcga

240 247

180

60 120

<210> 212

<211> 248

DNA <212>

Homo sapiens <213>

<400> 212

gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtgacca gatacatcta taaccgagag gagtacgcac gcttcgacag cgacgtgggg gtgtatcggg cggtgacgcc gctggggccg cctgccgccg agtactggaa cagccagaag gaagtcctgg aggggacccg ggcggagttg gacacggtgt gcagacacaa ctaccagttg gagetccgca cgaccttgca gcggcgag

60 120

180 240

248

<210> 213

<211> 526

DNA <212>

<213> Homo sapiens

<400> 213

ggccatgtgc tacttcacca acgggacgga gcgcgtgcgt tatgtgacca gatacatcta taaccgagag gagtacgcac gcttcgacag cgacgtggag gtgtaccggg cggtgacgcc gctggggccg cctgacgccg agtactggaa cagccagaag gaagtcctgg agaggacccg ggcggagttg gacacggtgt gcagacacaa ctaccagttg gagctccgca cgaccttgca gcggcgagtg gagcccacag tgaccatctc cccatccagg acagaggccc tcaaccacca caacetgetg gtetgeteag tgacagattt etatecagee cagateaaag teeggtggtt tcggaatgac caggaggaga caaccggcgt tgtgtccacc ccccttatta ggaacggtga ctggaccttc cagatcctgg tgatgctgga aatgactccc cagcatgccg tctacacctg ccacgtggag caccccagcc tccagaaccc catcaccgtg gagtgg

60 120

180 240

300

360 420

480

526

<210> 214

529 <211>

<212> DNA

<213> Homo sapiens

<400> 214

ggccatgtgc tacttcacca acgggacgga gcgcgtgcgt tatgtgacca gatacatcta taaccgagag gagtacgcac gcttcgacag cgacgtgggg gtgtatcggg cggtgacgcc gctggggccg cctgacgccg agtactggaa cagccagaag gaagtcctgg agaggacccg ggcggagttg gacacggtgt gcagacacaa ctaccagttg gagctccgca cgaccttgca geggegagtg gageceaeag tgaceatete eccateeagg acagaggeee teaaceaeca caacetgetg gtetgeteag tgacagattt etatecagee cagateaaag teeggtggtt tcggaatgac caggaggaga caaccggcgt tgtgtccacc ccccttatta ggaacggtga ctggaccttc cagatectgg tgatgetgga aatgacteec cageatggag aegtetacae ctgccacgtg gagcacccca gcctccagaa ccccatcacc gtggagtgg

60 120 180

240

300 360

420

480 529

<210> 215

<212> <213>	DNA Homo sapiens	
taaccga gctgggg	215 ttgc tacttcacca acgggacgga gegegtgegt ettgtgacca gatacateta tgag gagtacgcac gettcgacag egacgtgggg gtgtateggg eggtgacgee tgcg cetgeegeeg agtactggaa cagecagaag gaagteetgg agaggaceeg tgtg gacacggtgt geagacacaa etaccagttg gageteegea egacettgea ag	60 120 180 240 248
<210> <211> <212> <213>	216 248 DNA Homo sapiens	
<400>	216	
ggccatg taaccga gctgggg	rtgc tacttcacca acgggacgga gcgcgtgcgt cttgtgacca gatacatcta agag gagtacgcac gcttcgacag cgacgtgggg gtgtatcggg cggtgacgcc gccg cctgacgccg agtactggaa cagccagaag gaagtcctgg agaggacccg gttg gacacggtgt gcagacacaa ctaccagttg gagctccgca cgaccttgca	60 120 180 240 248
*		
<210><211><211><212><213>	DNA	
taaccg: gctggg	gtge taetteacea aegggaegga gegegtgegt tatgtgaeea gatacateta agag gagtaegeae gettegaeag egaegtggag gtgtaeeggg eggtgaegee geeg eetgaegeeg agtaetggaa eageeagaag gaagaeetgg agaggaeeeg gttg gaeaeggtgt geagaeaeaa etaeeagttg gageteegea egaeettgea	60 120 180 240 248
<210><211><211><212><213>	529 DNA	
. 4005	010	
taaccg gctggg ggcgtc gcggcg caacct tcggaa	gtgc tacttcacca acgggaccga gctcgtgcgg ggtgtgacca gatacatcta agag gagtacgcg gcttcgacag cgacgtgggg gtgtatcggg cggtgacgcc gcgg cttgacgcc gcttcgacag cgacgtgggg gtgtatcggg cggtgacgcc gcgg cttgacgcc agtactggaa tagccagaag gacatcctgg aggaggaccg ggtg gacaccgtat gcagacacaa ctaccagttg gagctccgca cgaccttgca agtg gagcccacag tgaccatctc cccatccagg acagaggccc tcaaccacca gctg gtctgctcag tgacagattt ctatccagcc cagatcaaag tccggtggtt tgac caggaggaga caactggcgt tgtgtccacc ccccttatta ggaacggtga cttc cagatcetgg tgatgctgga aatgactcc cagcgtggag acgtctacac cgtg gagcacccca gcctccagaa ccccatcatc gtggagtgg	60 120 180 240 300 360 420 480 529
<210> <211> <212> <213>	529 DNA	

gggcatgtgc tacttcacca acgggaccga gcgcgtgcgg ggtgtgacca gatacatcta taaccgagag gagtacgcgc gcttcgacag cgacgtgggg gtgtatcggg cggtgacgcc	60 120 180
gctgggggg cttgacgccg agtactggaa tagccagaag gacatcctgg aggaggaccg ggcgtcggtg gacaccgtat gcagacacaa ctaccagttg gagctccgca cgaccttgca gcggcgagtg gagcccacag tgaccatctc cccatccagg acagaggccc tcaaccacca	240 300
caacctgctg gtctgctcag tgacagattt ctatccagcc cagatcaaag tccggtggtt	360
tcggaatgac caggaggaga caactggcgt tgtgtccacc ccccttatta ggaacggtga ctggaccttc cagatcctgg tgatgctgga aatgactccc cagcgtggag acgtctacac	420 480
ctgccacgtg gagcacccca gcctccagaa ccccatcatc gtggagtgg	529

<210> 220

<211> 529

<212> DNA

<213> Homo sapiens

<400> 220

ggccatgtgc tacttcacca atgggacgga gcgcgtgcgt tatgtgacca gatacatcta taaccgagag gaggacgtgc gcttcgacag cgacgtgggg gtgtatcggg cggtgacgcc gcaggggggg cctgacgccg agtactggaa cagccagaag gacatcctgg agaggacccg ageggagttg gacacggtgt gcagacacaa ctacgaggtg gcgttccgcg ggatcttgca gaggagagtg gagcccacag tgaccatctc cccatccagg acagaggccc tcaaccacca 360 caacctgctg gtctgctcgg tgacagattt ctatccaggc cagatcaaag tccggtggtt tcggaatgac caggaggaga cagctggcgt tgtgtccacc ccccttatta ggaacggtga 480 ctggaccttc cagatcctgg tgatgctgga aatgactccc cagcatggag acgtctacac ctgccacgtg gagcacccca gcctccagag ccccatcacc gtggagtgg

<210> 221

<211> 204

<212> DNA

<213> Homo sapiens

<400> 221

gccatgtgct acttcaccaa cgggacggag cgcgtgcgtt atgtgaccag atacatctat aaccgagagg aggacgtgcg cttcgacagc gacgtggggg tgtatcgggc ggtgaccccg caggggcgc ctgacgccga gtactggaac agccagaagg acatcctgga gaggacccga gcggagttgg acacggtgtg caga

60

120

240

300

420 480

-529

180

60

120

240

300

420

529

180

<210> 222

<211> 529

DNA <212>

<213> Homo sapiens

<400> 222

ggccatgtgc tacttcacca atgggacgga gcgcgtgcgt tatgtgacca gatacatcta taaccgagag gaggacgtgc gcttcgacag cgacgtgggg gtgtatcggg cggtgacgcc gcaggggcgg cctgacgccg agtactggaa cagccagaag gacatcctgg agaggacccg ageggagttg gacaeggtgt geagacaeaa etaegaggtg gegtteegeg ggatettgea gaggagagtg gagcccacag tgaccatctc cccatccagg acagaggccc tcaaccacca 360 caacctgetg gtctgctcgg tgacagattt ctatccaggc cagatcaaag tccggtggtt tcggaatgac caggaagaga cagctggcgt tgtgtccacc ccccttatta ggaacggtga ctggaccttc cagatectgg tgatgetgga aatgacteec cageatggag aegtetaeae ctgccacgtg gagcacccca gcctccagag ccccatcacc gtggagtgg

<210> 223

<211> 529

<212> DNA

~ ~ ~	**	•
<213>	Homo	sapiens

gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtgacca gatacatcta 60 taaccgagag gagtacgcgc gcttcgacag cgacgtgggg gtgtaccgcg cggtgacgcc 120 gcaggggggg cctgatgccg agtactggaa cagccagaag gaagtcctgg aggggacccg 180 ggcggagttg gacacggtgt gcagacacaa ctacgaggtg gcgttccgcg ggatcttgca 240 gaggagagtg gagcccacag tgaccatctc cccatccagg acagaggccc tcaaccacca 300 caacetgetg gtetgetegg tgacagattt etatecagge cagateaaag teeggtggtt 360 teggaatgat eaggaggaga eageeggegt tgtgteeace eccettatta ggaatggtga 420 ctggactttc cagatcctgg tgatgctgga aatgactccc cagcgtggag atgtctacac 480 ctgccacgtg gagcacccca gcctccagag ccccatcacc gtggagtgg 529

<210> 224

<211> 529

<212> DNA

<213> Homo sapiens

### <400> 224

gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtaacca gacacatcta taaccgagag gagtacgcgc gcttcgacag cgacgtgggg gtgtaccgcg cggtgacgcc gcaggggcgg cctgatgccg agtactggaa cagccagaag gaagtcctgg aggggacccg ggcggagttg gacacggtgt gcagacacaa ctacgaggtg gcgttccgcg ggatcttgca 240 gaggagagtg gagcccacag tgaccatctc cccatccagg acagaggccc tcaaccaca 300 caacetgetg gtetgetegg tgacagattt etatecagge cagateaaag teeggtggtt 360 teggaatgat caggaggaga cageeggegt tgtgtecace cecettatta ggaatggtga 420 ctggactttc cagatectgg tgatgetgga aatgacteec cagegtggag atgtetacae 480 ctgccacgtg gagcacccca gcctccagag ccccatcacc gtggagtgg 529

60

60 120

180

240

289

120

180

<210> 225

<211> 529

<212> DNA

<213> Homo sapiens

### <400> 225

gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtaacca gacacatcta 60 taaccgagag gagtacgcgc gcttcgacag cgacgtgggg gtgtaccggg cggtgacgcc 120 gcaggggcgg cctgttgccg agtactggaa cagccagaag gaagtcctgg agaggacccg 180 ggcggagttg gacacggtgt gcagacacaa ctacgaggtg gggtaccgcg ggatcctgca 240 gaggagagtg gagcccacag tgaccatctc cccatccagg acagaggccc tcaaccaca 300 caacctgctg gtctgctcgg tgacagattt ctatccaggc cagatcaaag tccagtggtt 360 tcggaatgat caggaggaga cagccggcgt tgtgtccacc ccccttatta ggaatggtga 420 ctggactttc cagatcctgg tgatgctgga aatgactccc cagcgtggag atgtctacac 480 ctgccacgtg gagcacccca gcctccagag ccccatcacc gtggagtgg 529

<210> 226

<211> 289

<212> DNA

<213> Homo sapiens

## <400> 226

gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtaacca gacacatcta taaccgagag gagtacgcgc gettegacag egacgtgggg gtgtacegeg eggtgacgce gcaggggggg cctgttgccg agtactggaa cagccagaag gaagtcctgg agaggacccg ggcggagttg gacacggtgt gcagacacaa ctacgaggtg gggtaccgcg ggatcctgca gaggagagtg gagcccacag tgaccatctc cccatccagg acagaggcc

<210> 227		
<211> 289		
<212> DNA		
<213> Homo sapiens		
<400> 227		
gggcctgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtaacca gatacatcta	60	
taaccgagag gagtacgcgc gcttcgacag cgacgtgggg gtgtaccggg cggtgacgcc	120	
gcaggggcgg cctgttgccg agtactggaa cagccagaag gaagtcctgg agaggacccg		
	<i>.</i> "	
ggcggagttg gacacggtgt gcagacacaa ctacgaggtg gggtaccgcg ggatcctgca		
gaggagagtg gagcccacag tgaccatctc cccatccagg acagaggcc	289	
<210> 228		
<211> 173		
<212> DNA		
<213> Homo sapiens		
•		
<400> 228		
ggacggagcg cgtgcgtctt gtaaccagat acatctataa ccgagaggag tacgcgcgct	60	
tcgacagcga cgtgggggtg taccgggcgg tgacgccgca ggggcggcct gtcgccgagt	120	
actggaacag ccagaaggaa gtcctggaga ggacccgggc ggagttggac acg	173	
acikkaacak ccakaakkaa kiicikkaka kkaccikkko kkakiikkaa ack	170	
r010x 000		
<210> 229		
<211> 176		
<212> DNA		
<213> Homo sapiens		
<400> 229		
ggacggagcg cgtgcgtctt gtaaccagat acatetataa ccgagaggag tacgcgcgct	60	
tcgacagcga cgtgggggtg taccgggcgg tgacgccgca ggggcggcct gttgccgagt	120	
actggaacag ccagaaggaa gtcctggaga ggacccgggc ggcggtggac agggtg	176	
anglamone confumpem accordence beneather beneather beneather and beneather b		
<210> 230		
<210> 236 <211> 236	•	
<212> DNA		
<213> Homo sapiens		
<400> 230gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtaacca		60
taaccgagag gagtacgcgc gettegacag egacgtgggg gtgtacegeg eggtgacgce	120	
gcaggggggg cctgatgccg agtactggaa cagccagaag gaagtcctgg agaggaccc	g 180	
ggcggagttg gacacggtgt gcagacacaa ctacgaggtg gggtaccgcg ggatcc	236	
<210> 231		
<211> 236		
<211> 230 <212> DNA		
·		
<213> Homo sapiens		
400 001		
<400> 231	00	
gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtaacca gacacatcta	60	
taaccgagag gagtacgcgc gettegacag egacgtgggg gtgtaccgcg eggtgacgce	120	
gcaggggcgg cctgttgccg agtactggaa cagccagaag gaagtcctgg aggggaccc		
ggcggagttg gacacggtgt gcagacacaa ctacgaggtg gcgttccgcg ggatct	236	
00-00-00-00-00-00-00-00-00-00-00-00-00-		

<211> 529	
<212> DNA	•
<213> Homo sapiens	
<400> 232	CÒ
gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtaacca gatacatcta	$\begin{array}{c} 60 \\ 120 \end{array}$
taaccgagag gagtacgcgc gcttcgacag cgacgtgggg gtgtaccggg cggtgacgcc	180
gcaggggcgg cctgttgccg agtactggaa cagccagaag gaagtcctgg agaggacccg	240
ggeggagttg gacaeggtgt geagacaeaa etaegaggtg gggtaeegeg ggateetgea gaggagagtg gageeeaeag tgaceatete eccateeagg acagaggeee teaa'eeaea	300
caacetgetg gtetgetegg tgacagattt etatecagge cagateaaag tecagtggtt	360
tcggaatgat caggaggaga cagccggcgt tgtgtccacc ccccttatta ggaatggtga	420
ctggactttc cagatectgg tgatgetgga aatgacteec cagegtggag atgtetacae	480
ctgccacgtg gagcacccca gcctccagag ccccatcacc gtggagtgg	529
040 000	
<210> 233	
<211> 248 <212> DNA	
<213> Homo sapiens	
1210 Homo sapiens	
<400> 233	
gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtgacca gatacatcta	60
taaccgagag gagtacgcgc gcttcgacag cgacgtgggg gtgtaccgcg cggtgacgcc	120
gcaggggcgg cctagcgccg agtactggaa cagccagaag gaagtcctgg aggggacccg	
ggcggagttg gacacggtgt gcagacacaa ctacgaggtg gcgttccgcg ggatcttgca	240
gaggagag	248
<210> 234	
<211> 244	
<212> DNA	
<213> Homo sapiens	
<400> 234	00
gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtgacca gatacatcta	60 120
taaccgagag gagtacgcgc gcttcgacag cgacgtgggg gtgtaccgcg cggtgacgcc gcaggggegg cctgatgccg agtactggaa cagccagaag gaagtcctgg aggggacccg	
ggcggagttg gacacggtgt gcagacacaa ctacgaggtg gcgttccgcg ggatcttgca	240 ·
gagg	244
<210> 235	
<211> 248	
<212> DNA <213> Homo sapiens	
<213> Homo sapiens	
<400> 235	
gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtaacca gatacatcta	60
taaccgagag gagtacgcgc gcttcgacag cgacgtgggg gtgtaccgcg cggtgacgcc	120
gcaggggcgg cctgatgccg agtactggaa cagccagaag gaagtcctgg aggggacccg	180
ggcggagttg gacacggtgt gcagacacaa ctacgaggtg gcgttccgcg ggatcttgca	240
gaggagag	248
<210> 236	
<210	

<211> 529

<212> DNA <213> Homo sapiens

60 gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtaacca gatacatcta taaccgagag gagtacgcgc gcttcgacag cgacgtgggg gtgtaccggg cggtgacgcc 120 gcaggggcgg cctgttgccg agtactggaa cagccagaag gaagtcctgg aggggacccg 180 ggcggagttg gacacggtgt gcagacacaa ctacgaggtg gggtaccgcg ggatcctgca 240 300 gaggagagtg gagcccacag tgaccatctc cccatccagg acagaggccc tcaaccacca caacetgetg gtetgetegg tgacagattt etateeagge cagateaaag teeagtggtt 360 tcggaatgat caggaggaga cagccggcgt tgtgtccacc ccccttatta ggaatggtga 420 480 ctggactttc cagatectgg tgatgetgga aatgacteec cagegtggag atgtetacae 529 ctgccacgtg gagcacccca gcctccagag ccccatcacc gtggagtgg

<210> 237

<211> 234

<212> DNA

<213> Homo sapiens

<400> 237

60 gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtgacca gatacatcta 120 taaccgagag gagtacgcgc gettegacag egacgtgggg gtgtaccgcg eggtgacgcc gcagggggg cctgttgccg agtactggaa cagccagaag gaagtcctgg aggggacccg ggcggagttg gacacggtgt gcagacacaa ctacgaggtg gcgttccgcg ggat 234

180

238 <210>

<211> 248

<212> DNA

<213> Homo sapiens

<400> 238

gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtaacca gacacatcta taaccgagag gagtacgcgc gcttcgacag cgacgtgggg gtgtaccgcg cggtgacgcc gcaggggcgg cctgatgccg agtactggaa cagccagaag gaagtcctgg aggggacccg ggcggagttg gacacggtgt gcagacacaa ctacgaggtg gcgttccgcg ggatcttgca gaggagag

120 180 240

60

248

<210> 239

<211> 248

<212> DNA

<213> Homo sapiens

<400> 239

gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtgacca gatacatcta taaccgagag gagtacgcgc gcttcgacag cgacgtgggg gtgtaccgcg cggtgacgcc gcaggggcgg cctgatgccg agtactggaa cagccagaag gaagtcctgg agaggacccg ggcggagttg gacacggtgt gcagacacaa ctacgaggtg gggtaccgcg ggatcctgca gaggagag

60 120

180 240

248

<210> 240

248 <211>

<212> DNA

<213> Homo sapiens

<400> 240gggcatgtgc tacttcacca acgggacgga gcgcgtgcgt cttgtgacca gatacatcta 120 taaccgagag gagtacgcgc gettegacag egacgtgggg gtgtacegeg eggtgacgee geagggegg cetgatgeeg agaactggaa cagceagaag gaagteetgg aggggacceg ggcggagttg gacacggtgt gcagacacaa ctacgaggtg gcgttccgcg ggatcttgca 240 gaggagag

60

248

<210> 244

<211> 229

<212> DNA

<213> Homo sapiens

<400> 244

gggcctgtge tacttcacca acgggacgga gcgcgtgcgt cttgtgacca gatacateta taaccgagag gagtacgcgc gcttcgacag cgacgtgggg gtgtaccgcg cggtgacgcc gcagggggcgg cctgatgccg agtactggaa cagccagaag gaagtcctgg aggggacccg ggcggagttg gacacggtgt gcagacacaa ctacgaggtg gcgttccgc

60

120

180

# SEQUENCE LISTING DR

		٠,
<110>	CANON KABUSHIKI KAISHA	
<120>	Probe set and method for identifying HLA allele	
<130>	g10003828DR	
<150> <151>	JP2003-430558 2003-12-25	
<160>	827	
<170>	PatentIn version 3.2	
<210> <211> <213>	1 370<212> DNA Homo sapiens	
gtgctga; aagtttg; tataacc; gagctgg	gte tgaagetee tggaggetee tgeatgacag egetgacagt gacactgatg get ecceaetgge tttggetggg gacaceegae eaegtteett gtggeagett aat gteatttett eaatgggacg gagegggtge ggttgetgga aagatgeate aag aggagteegt gegettegae agegacgtgg gggagtaceg ggeggtgacg gge ggeetgatge egagtaetgg aacageeaga aggaceteet ggageagagg egg tggacaceta etgeagacae aactaegggg ttggtgagag etteacagtg	60 120 180 240 300 360
<210> <211> <212> <213>	2 270 DNA Homo sapiens	
ggttgctg gggagta aggacct	tt gtggcagctt aagtttgaat gtcatttett caatgggaeg gagegggtge gga aagatgeate tataaccaag aggaateegt gegettegae agegaegtgg eeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacageeaga eet ggageagagg egggeegegg tggaeaceta etgeagaeae aactaegggg gag etteacagtg eageggegag	60 120 180 240 270
<210><211><211><212><212><213>	3 283 DNA Homo sapiens	
acggago gacagog tggaaca	3 .ccc gaccacgttt cttgtggcag cttaagtttg aatgtcattt cttcaatggg ggg tgcggttgct ggaaagatgc atctataacc aagaggagtc cgtgcgcttc acg tgggggagta ccgggcggtg acggagctgg ggcggcctga tgccgagtac gcc agaaggacct cctggagcag aggcggccg cggtggacac ctattgcaga acg gggctgtgga gagcttcaca gtgcagcggc gag	60 120 180 240 283
<210><211><211><212><213>	4 246 DNA Homo sapiens	
~~~	4 tt gtggcagett aagtttgaat gteatttett caatgggaeg gagegggtge	60

ggttgctgga aagatgcate tataaccaag aggagtccgt gegettegae agegaegtgg gggagtaccg ggeggtgacg gagetgggge ggeetgatge egagtactgg aacagecaga aggaceteet ggageagagg egggeegeeg tggacaceta ttgcagacae aactaegggg etgtgg	120 180 240 246
<210> 5 <211> 370 <212> DNA <213> Homo sapiens	
<400> 5 atggtgtgte tgaageteee tggaggetee tgeatgacag egetgacagt gacactgatg gtgetgaget ecceaetgge tttggetggg gacaccegae eacgtteett gtggeagett aagtttgaat gteatttett eaatgggaeg gagegggtge ggttgetgga aagatgeate tataaccaag aggagteegt gegettegae agegagetgg gggagtaceg ggeggtgaeg gagetgggge ggeetgatge egggtaetgg aacageagageggeeggeggeggeggeggtgeegggtgeegggeggg	60 120 180 240 300 360 370
<210> 6 <211> 283 <212> DNA <213> Homo sapiens	
<400> 6 ggggacaccc gaccacgttt cttgtggcag cttaagtttg aatgtcattt cttcaatggg acggagcggg tgcggttgct ggaaagatgc atctataacc aagaggagtc cgtgcgcttc gacagcgacg tgggggagta ccgggcggtg acggagctgg ggcggcctga tgccgagtac tggaacagcc agaaggacct cctggagcag aggcgggccg cggtggacaa ttactgcaga cacaactacg gggttgtgga gagcttcaca gtgcagcggc gag	60 120 180 240 283
<210> 7 <211> 270 <212> DNA <213> Homo sapiens	
<400> 7 cacgtttett gtggcagett aagtttgaat gteatttett eaatgggaeg gagegggtge ggttgetgga aagatgeate tataaceaag aggagteegt gegettegae agegaegtga gggagtaeeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacageeaga aggaeeteet ggageagagg egggeegegg tggaeaceta etgeagaea aactaegggg ttggtgagag etteacagtg eageggegag	60 120 180 240 270
<210> 8 <211> 270 <212> DNA <213> Homo sapiens	
<400> 8 cacgtttett gtggcagett aagtttgaat gteatttett eaatgggaeg gagegggtge ggttgetgga aagatgeate tataaceaag aggagteegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacageeaga aggaeeteet ggageaggeg eggeegegg tggaeaceta etgeagaeae aactaegggg ttgtggagag etteaeagtg eageggegag	60 120 180 240 270
<210> 9 <211> 270 <212> DNA	

<213> Homo sapiens	
<400> 9 cacgtttctt gtgggagctt aagtttgaat gtcatttctt caatgggacg gagcgggtgc ggttgctgga aagatgcatc tataaccaag aggagtccgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga aggacctcct ggagcagagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttggtgagag cttcacagtg cagcggcgag	60 120 180 240 270
<210> 10 <211> 270 <212> DNA <213> Homo sapiens	
<400> 10 cacgtttett gtggcagett aagtttgaat gtcatttett caatgggaeg gagegggtge ggttgetgga aagatgeate tataaceaag aggagtaegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacageeaga aggaeeteet ggageagagg egggeegeg tggaeaceta etgeagaeae aactaegggg ttggtgagag etteacagtg eageggegag	60 120 180 240 270
<210> 11 <211> 270 <212> DNA <213> Homo sapiens	
<400> 11 cacgtttctt gtggcagctt aagtttgaat gtcatttctt caatgggacg gagcgggtgc ggttgctgga aagatgcatc tataaccaag aggagtccgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctgggc ggcctgatgc cgagtactgg aacagccaga aggacctcct ggagcaggcg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttggtgagag cttcacagtg cagcggcgag	60 120 180 240 270
<210> 12 <211> 270 <212> DNA <213> Homo sapiens	
<400> 12 cacgtttett gtggcagett aagtttgaat gteatttett caatgggaeg gagegggtge ggttgetgga aagatgeate tataaccaag aggagteegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacageeaga aggaeeteet ggageagaag egggeegeg tggaeaceta etgeagaea aactaegggg ttggtgagag etteacagtg eageggegag	60 120 180 240 270
<210> 13 <211> 283 <212> DNA <213> Homo sapiens	
<400> 13 ggggacacca gaccacgttt cttggagtac tetacgtetg agtgtcattt ettcaatggg acggagcggg tgcggtacct ggacagatac ttccataacc aggaggagaa cgtgcgcttc gacagcgacg tgggggagtt ccgggcggtg acggagctgg ggcggcctga tgccgagtac tggaacagcc agaaggacct cctggagcag aagcggggcc gggtggacaa ctactgcaga cacaactacg gggttgtgga gagcttcaca gtgcagcgc gag	60 120 180 240 283

<210> 14 <211> 265

<211> 255 <212> DNA

<213> Homo sapiens

<400> 17

tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt cctggagaga tacttccata accaggagga gaacgtgcgc ttcgacagcg acgtgggga gtaccgggcg gtgacggagc tggggcggcc tgatgccgag tactggaaca gccagaagga cctcctggag cagaagcggg gccgggtgga caactactgc agacacaact acggggttgt ggagagcttc acagtgcagc ggcga

60

60

120

180

240

120 180

240 255

<210> 18

<211> 270 <212> DNA

<213> Homo sapiens

<400> 18

cacetttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge ggtaeetgga eagataette eataaceagg aggagteegt gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacageeaga aggaeeteet ggageagaag eggggeeggg tggaeaacta etgeagaeae aactaeggg

ttgtggagag cttcacagtg cagcggcgag		270
<210>	19	
<211>	270	
<212>	DNA	
<213>	Homo sapiens	
<400>	19	
	tt ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge	60 120
	gga cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg ccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga	180
	cct ggagcagaag cggggccggg tggacaacta ctgcagacac aactacgggg	240
	gag cttcacagtg cagcggcgag	270
<210>	20	
<211>	270	
<212>	DNA	
<213>	Homo sapiens	
<400>	·. 20	
	tt ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge	60
	gga cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg	120
	ccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga	180
	cct ggagcagaag eggggeeggg tggacaacta etgeagacae aactaegggg	$\begin{array}{c} 240 \\ 270 \end{array}$
ııggıga	gag etteaeggtg eageggegag	210
<210>	21	
<211>	258	
<212>	DNA	•
<213>	Homo sapiens	
<400>	21	
	gt actctacgte tgagtgtcat ttettcaatg ggacggageg ggtgeggtae	60
	gat acttecataa ecaggaggag aacgtgeget tegacagega egtgggggag egg tgacggaget ggggeggeet gatgeegagt actggaacag ecagaaggae	120 180
	age agaagegggg eegggtggae aactaetgea gacacaacta eggggttgtg	240
	tca cagtgcag	258
	•	
<210>	22	
<211>	283	
<212>	DNA	
<213>	Homo sapiens	
<400>	22	
	acca gaccacgttt cttggagtac tctacgtctg agtgtcattt cttcaatggg	60
	eggg tgeggtteet ggacagatae tteeataace aggaggagaa egtgegette	120
gacagce	gacg tgggggagtt ccgggcggtg acggagctgg ggcggcctga tgccgagtac	180
	igcc agaaggacet cetggagcag aageggggee gggtggacaa etaetgeaga	240
cacaact	acg gggttgtgga gagcttcaca gtgcagcggc gag	283
<210>	23	
<211>	283 DNA	
<212> <213>	DNA Homo sapiens	
-21U/	Tomo Sapieno	
<400>	23	CO
ggggac	acca gaccacgttt cttggagtac tctacgtctg agtgtcattt cttcaatggg cggg tgcggtacct ggacagatac ttccataacc aggaggagaa cgtgcgcttc	$\begin{array}{c} 60 \\ 120 \end{array}$
acggagi	-666 v6-66vacev 66acabavae viocavaace a66a66a6aa o6v6e6eve	

gacagcgacg tgggggagtt ccgggcggtg acggagctgg ggcggcctga tgaggagtac tggaacagcc agaaggacct cctggagcag aagcggggcc gggtggacaa ctactgcaga cacaactacg gggttgtgga gagcttcaca gtgcagcggc gag	180 240 283
<210> 24 <211> 258 <212> DNA <213> Homo sapiens	
<400> 24 ttggagtact ctacgtctga gtgtcatttc ttcaatggga cggagcgggt gcggtacctg gacagatact tccataaccg ggaggagaac gtgcgcttcg acagcgacgt gggggagttc cgggcggtga cggagctggg gcggcctgat gccgagtact ggaacagcca gaaggacctc ctggagcaga agcggggccg ggtggacaac tactgcagac acaactacgg ggttggtgag agcttcacag tgcagcgg	60 120 180 240 258
<210> 25 <211> 283 <212> DNA <213> Homo sapiens	
<400> 25 ggggacacca gaccacgttt cttggagtac tetacgtetg agtgteattt etteaatggg acggageggg tgeggtacct ggacagatac ttecataacc aggaggagaa egtgegette gacagegacg tgggggagtt eegggeggtg acggagetgg ggeggeetge tgeggageac tggaacagec agaaggacet eetggageag aageggggee gggtggacaa etactgeaga cacaactaeg gggttgtgga gagetteaca gtgeagegge gag	60 120 180 240 283
<210> 26 <211> 269 <212> DNA <213> Homo sapiens	
<400> 26 cacgtttett ggagtaetet aegtetgagt gteatttett eaatgggaeg gagegggtge ggtaeetgga eagataette eataaceagg aggagaaegt gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacageeaga aggaeeteet ggageagaag eggggeeagg tggaeaaeta etgeagaeae aactaegggg ttgtggagag etteaeagtg eageggega	60 120 180 240 269
<210> 27 <211> 240 <212> DNA <213> Homo sapiens	
<400> 27 ttggagtact ctacgtctga gtgtcatttc ttcaatggga cggagcggt gcggtacctg gacagatact tccataacca ggaggagaac gtgcgcttcg acagcgacgt gggggagttc cgggcggtga cggagctggg gcggcctagc gccgagtact ggaacagcca gaaggacctc ctggagcaga agcggggccg ggtggacaac tactgcagac acaactacgg ggttgtggag	60 120 180 240
<210> 28 <211> 270 <212> DNA <213> Homo sapiens	

<400> 28 cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gagegggtge	60	
ggtacctgga cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg gggagttccg ggcggtgacg gagctggggc ggcctgatgc cgagtcctgg aacagccaga aggacctcct ggagcagaag cggggccggg tggacaacta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag	120 180 240 270	
<210> 29		
<211> 270 <212> DNA		
<213> Homo sapiens		
<400> 29	60	
cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gagegggtge ggtaeetgga cagataette cataaceagg aggagaaegt gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacageeaga aggaeeteet ggageagaag egggeeggg tggaeaeeta etgeagaeae aactaegggg ttggtgagag etteaeagtg eageggegag	120 180	
<210> 30		
<211> 269 <212> DNA		
<213> Homo sapiens		
<400> 30cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gage	egggtgc 120	60
ggtacetgga cagatactte cataaccagg aggagaacgt gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacagecaga	180	
aggaceteet ggageagaag eggggeeggg tggacaceta etgeagacae aactaegggg		
ttgtggagag cttcacagtg cagcggcga	269	
<210> 31		
<211> 245 <212> DNA		
<213> Homo sapiens		
<400> 31		
cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc	$\begin{array}{c} 60 \\ 120 \end{array}$	
ggtacetgga cagatactte cataaccagg aggagaacgt gegettegae agegaegtgg gggagttetg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacagecaga	180	
aggaccteet ggagcagaag eggggeeggg tggacaacta etgeagacae aactaegggg	240	
aggacetect ggagcagaag eggggeeggg tggacaacta etgeagacae aactaegggg ttgtg	240 245	
aggacetect ggageagaag eggggeeggg tggacaacta etgeagacae aactaegggg ttgtg  <210> 32		
aggacetect ggageagaag eggggeeggg tggacaacta etgeagacae aactaegggg ttgtg  <210> 32 <211> 270		
aggacetect ggageagaag eggggeeggg tggacaacta etgeagacae aactaegggg ttgtg  <210> 32		
aggacetect ggageagaag eggggeeggg tggacaacta etgeagacae aactaegggg ttgtg  <210> 32 <211> 270 <212> DNA <213> Homo sapiens		
aggacetect ggageagaag eggggeeggg tggacaacta etgeagacae aactaegggg ttgtg  <210> 32 <211> 270 <212> DNA <213> Homo sapiens  <400> 32 caegtttett ggagtaetet aegtetgagt gteatttett caatgggaeg gagegggtge	245	
aggacetect ggageagaag eggggeeggg tggacaacta etgeagacae aactaegggg ttgtg  <210> 32 <211> 270 <212> DNA <213> Homo sapiens  <400> 32 caegtteett ggagtaeteet aegteeggt gteatteett caatgggaeg gagegggtge ggteetgga eagataette tataaceaag aggagtaegt gegettegae agegaegtgg	245 60 120	
aggacetect ggagcagaag eggggeegg tggacaacta etgeagacae aactaegggg ttgtg  <210> 32 <211> 270 <212> DNA <213> Homo sapiens  <400> 32 caegtteett ggagtaetet aegtetgagt gteatteett eaatgggaeg gagegggtge ggtteetgga eagataette tataaceaag aggagtaegt gegettegae agegaegtgg gggagtaeeg ggeggtgagg gagetggge ggeetgatge eggataetgg aacageeaga	245 60 120 180	
aggacetect ggageagaag eggggeeggg tggacaacta etgeagacae aactaegggg ttgtg  <210> 32 <211> 270 <212> DNA <213> Homo sapiens  <400> 32 caegtteett ggagtaeteet aegteeggt gteatteett caatgggaeg gagegggtge ggteetgga eagataette tataaceaag aggagtaegt gegettegae agegaegtgg	245 60 120 180	
aggacetect ggageagaag eggggeeggg tggacaacta etgeagacae aactaegggg ttgtg  <210> 32 <211> 270 <212> DNA <213> Homo sapiens  <400> 32 caegtteett ggagtaeteet aegtetgagt gteatteett eaatgggaeg gagegggtge ggtteetgga eagataette tataaecaag aggagtaegt gegettegae agegaegtgg ggagtaeeg ggeggtgagg gagetggge ggeettgae eagaegtgg ggagtaeeg ggeggtgagg gagetggge ggeetgatge eggteetegae aacageeaga aggaeeteet ggageagaag eggggeeagg tggacaatta etgeagaeae aactaegggg ttggtgagag etteaeagtg eageggegag  <210> 33	245 60 120 180 240	
aggacetect ggageagaag eggggeegg tggacaacta etgeagacae aactaegggg ttgtg  <210> 32 <211> 270 <212> DNA <213> Homo sapiens  <400> 32 caegtteett ggagtaetet aegtetgagt gteatteett caatgggaeg gagegggtge ggtteetgga eagataette tataaceaag aggagtaegt gegettegae agegaegtgg gggagtaeeg ggeggtgagg gagetggge ggeettate eggageagtaeg gggagtaeeg geggtgagg gagetggge ggeettate eggageagaag aggaeeteet ggageagaag egggeeagg tggacaatta etgeagacae aactaegggg ttggtgagag etteacagtg eageggegag	245 60 120 180 240	

<400> 33 cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc ggtacctgga cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgc gggagttccg ggcggtgacg gagctgggc ggcctgatgc cgagtactgg aacagccaga aggacctcct ggagcagaag cggggccggg tggacaacta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag	60 120 180 240 270
<210> 34 <211> 270 <212> DNA <213> Homo sapiens	
<400> 34 cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge ggtaeetgga eagataette eataaceagg aggagaaegt gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetggge ggeetgatge egagtaetgg aacageeaga aggaeateet ggageagaag eggggeeggg tggaeaaeta etgeagaea aactaegggg ttgtggagag etteacagtg eageggegag	60 120 180 240 270
<210> 35 <211> 266 <212> DNA <213> Homo sapiens	
<400> 35 cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc ggtacctgga cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg gggagttccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga aggacctcct ggagcagaag cggggccggg tggacaacta ctgcagacac aactacgggg ctgtggagag cttcacagtg cagcgg	60 120 180 240 266
<210> 36 <211> 267 <212> DNA <213> Homo sapiens	
<400> 36 cgtttcttgg agtactctac gtctgagtgt catttcttca atgggacgga gcgggtgcgg ttcctggaca gatacttcca taaccaggag gagttcgtgc gcttcgacag cgacgtgggg gagttccggg cggtgacgga gctggggcgg cctgatgccg agtactggaa cagccagaag gacctcctgg agcagaagcg gggccgggtg gacaactact gcagacacaa ctacggggtt gtggagagct tcacagtgca gcggcga	60 120 180 240 267
<210> 37 <211> 266 <212> DNA <213> Homo sapiens	
<400> 37 tttcttggag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggta cctggacaga tacttcgata accaggagga gaacgtgcgc ttcgacagcg acgtggggga gttccgggcg gtgacggagc tggggcggcc tgatgccgag tactggaaca gccagaagga cctcctggag cagaagcggg gccgggtgga caactactgc agacacaact acggggttgt ggagagcttc acagtgcagc ggcgag	60 120 180 240 266

<210> 39 <211> 270

<212> DNA

WO 2005/063985

270

38

DNA

Homo sapiens

<211>

<212>

<213>

<400>

<213> Homo sapiens

<400>

cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gagegggtge 60 ggttcctgga cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg 120 gggagtteeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacageeaga 180 aggaceteet ggagcagaag eggggceagg tggacaatta etgeagacae aactaegggg 240 ttgtggagag cttcacagtg cagcggcgag 270

<210> 40

<211> 270

<212> DNA

<213> Homo sapiens

<400> 40

cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc 60 ggtacctgga cagatacttc cataaccagg aggagtacgt gcgcttcgac agcgacgtgg 120 gggagttccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga 180 aggaceteet ggagcagaag eggggeeggg tggacaacta etgeagacae aactaegggg 240 ttgtggagag cttcacagtg cagcggcgag 270

<210> 41

<211> 370

<212> DNA

<213> Homo sapiens

<400> 41

atggtgtgtc tgaagttccc tggaggctcc tgcatggcag ctctgacagt gacactgatg 60 gtgctgaget ecceaetgge tttggetggg gacaecegae eaegtttett ggageaggtt 120 aaacatgagt gtcatttctt caacgggacg gagcgggtgc ggttcctgga cagatacttc 180 tatcaccaag aggagtacgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagetgggge ggeetgatge egagtaetgg aacagecaga aggaceteet ggageagaag egggeegegg tggacaceta etgeagacae aactaegggg ttggtgagag etteacagtg cagcggcgag

360 370

240

300

<210> 42

<211> 270

<212> DNA

<213> Homo sapiens

<400>

cacgtttett ggagcaggtt aaacatgagt gteatttett caacgggaeg gagegggtge ggttcctgga cagatacttc tatcaccaag aagagtacgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga aggaceteet ggageagaag egggeegegg tggacaceta etgeagacae aactaegggg ttggtgagag cttcacagtg cagcggcgag

60 120

> 180 240

```
<210>
       43
<211>
       370
<212>
       DNA
<213> Homo sapiens
<400>
atggtgtgtc tgaagttccc tggaggctcc tgcatggcag ctctgacagt gacactgatg
                                                                  60
                                                                 120
gtgetgaget ecceaetgge tttggetggg gaeaecegae eaegtttett ggageaggtt
                                                                  180
aaacatgagt gtcatttctt caacgggacg gagcgggtgc ggttcctgga cagatacttc
                                                                    240
tatcaccaag aggagtacgt gegettegae agegaegtgg gggagtaceg ggeggtgaeg
                                                                    300
gagctggggc ggcctgatgc cgagtactgg aacagccaga aggacatcct ggaagacgag
                                                                   360
cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg
                                                                       370
cagcggcgag
<210>
       44
<211>
       283
<212> DNA
<213> Homo sapiens
<400> 44
ggggacaccc gaccacgttt cttggagcag gttaaacatg agtgtcattt cttcaacggg
                                                                   60
acggagcggg tgcggttcct ggacagatac ttctatcacc aagaggagta cgtgcgcttc
                                                                  120
gacagegacg tgggggagta ccgggcggtg acggagctgg ggcggcctga tgccgagtac
                                                                    180
tggaacagcc agaaggacct cctggagcag aggcgggccg aggtggacac ctactgcaga
                                                                    240
cacaactacg gggttgtgga gagcttcaca gtgcagcggc gag
                                                                    283
<210>
        45
<211>
        270
<212>
       DNA
<213> Homo sapiens
<400> 45
                                                                   60
cacgtttctt ggagcaggtt aaacatgagt gtcatttctt caacgggacg gagcgggtgc
                                                                   120
ggttcctgga cagatacttc tatcaccaag aggagtacgt gcgcttcgac agcgacgtgg
                                                                    180
gggagtaccg ggcggtgacg gagctggggc ggcctgacgc tgagtactgg aacagccaga
                                                                    240
aggaceteet ggageagagg egggeegagg tggacaceta etgeagacae aactaegggg
                                                                     270
ttgtggagag cttcacagtg cagcggcgag
<210>
        46
<211>
        370
        DNA
<212>
<213>
        Homo sapiens
<400>
        46
                                                                   60
atggtgtgtc tgaagttccc tggaggctcc tgcatggcag ctctgacagt gacactgatg
gtgctgaget ccccactggc tttggctggg gacacccgac cacgtttctt ggagcaggtt
                                                                 120
                                                                  180
aaacatgagt gtcatttctt caacgggacg gagcgggtgc ggttcctgga cagatacttc
tatcaccaag aggagtacgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg
                                                                    240
                                                                    300
gagctggggc ggcctgatgc cgagtactgg aacagccaga aggacctcct ggagcagagg
cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg
                                                                   360
                                                                       370
cagcggcgag
<210>
        47
<211>
        282
<212>
        DNA
<213>
        Homo sapiens
<400> 47
```

ggggacaccc gaccacgttt cttggagcag gttaaacatg agtgtcattt cttcaacggg acggagcggg tgcggttcct ggacagatac ttctatcacc aagaggagta cgtgcgcttc gacagcgacg tgggggagta ccgggcggtg acggagctgg ggcggcctag cgccgagtac tggaacagcc agaaggacct cctggagcag aggcggccg cggtggacac ctactgcaga cacaactacg gggttggtga gagcttcaca gtgcagcggc ga	60 120 180 240 282
<210> 48 <211> 270 <212> DNA <213> Homo sapiens	
<400> 48 cacgtttett ggagcaggtt aaacatgagt gtcatttett caacgggacg gagcgggtgc ggtteetgga cagatactte tateaceaag aggagtacgt geggttegae agegacgtgg gggagtaceg ggeggtgacg gagetgggge ggeetagege egagtactgg aacageeaga aggaceteet ggagcagagg egggeegegg tggacaceta etgeagacae aactaegggg ttggtgagag etteacagtg cageggegag	60 120 180 240 270
<210> 49 <211> 270 <212> DNA <213> Homo sapiens	
<400> 49 cacgtttctt ggagcaggtt aaacatgagt gtcatttctt caacgggacg gagcgggtgc ggttcctgga cagatacttc tatcaccaag aggagtacgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctagcgc cgagtactgg aacagccaga aggacctcct ggagcagagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttggtgagag cttcacagtg cagcgacgag	60 120 180 240 270
<210> 50 <211> 270 <212> DNA <213> Homo sapiens	
<400> 50cacgtttett ggagcaggtt aaacatgagt gteatttett eaacgggaeg gag ggtteetgga eagataette tateaceaag aggagtaegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetagege egagtaetgg aacageeaga aggaeeteet ggagcagagg egggeegegg tggacaeeta etgeagaeae aactaegggg ttggtgagag etteaeggtg eageggegag	cgggtgc 60 120 180 240 270
<210> 51 <211> 283 <212> DNA <213> Homo sapiens	
<400> 51 ggggacaccc gaccacgttt cttggagcag gttaaacatg agtgtcattt cttcaacggg acggagcggg tgcggttcct ggacagatac ttctatcacc aagaggagtc cgtgcgcttc gacagcgacg tgggggagta ccgggcggtg acggagctgg ggcggcctga tgccgagtac tggaacagcc agaaggacct cctggagcag aggcgggccg aggtggacac ctactgcaga cacaactacg gggttgtgga gagcttcaca gtgcagcggc gag	60 120 180 240 283
<210> 52	

<211> 282 <212> DNA <213> Homo sapiens

<400> 52 ggggacaccc gaccacgttt cttggagcag gttaaacatg agtgtcattt cttcaacggg acggagcggg tgcggttcct ggacagatac ttctatcacc aagaggagta cgtgcgcttc gacagcgacg tgggggagta ccgggcggtg acggagctgg ggcggcctga tgccgagtac tggaacagcc agaaggacct cctggagcag aggcggccg aggtggacac ctactgcaga cacaactacg gggttggtga gagcttcaca gtgcagcggc ga	60 120 180 240 282
<210> 53 <211> 266 <212> DNA <213> Homo sapiens	
<400> 53 cacetttett ggagcaggtt aaacatgagt gteatttett eaacgggaeg gagegggtge ggtteetgga eagataette tateaceaag aggagtaegt gegettegae agegaegtgg ggagtaeeg ggeggtgaeg gagetggge ggeetgatge egagtaetgg aacageeaga aggaeeteet ggagcagaga egggeegagg tggaeaceta etgeagaea aactaegggg ttggtgagag etteaeagtg eagegg	60 120 180 240 266
<210> 54 <211> 266 <212> DNA <213> Homo sapiens	
<400> 54 tttcttggag caggttaaac atgagtgtca tttcttcaac gggacggagc gggtgcggtt cctggacaga tacttctatc accaagagga gtacgtgcgc ttcgacagcg acgtgggga gtaccgggcg gtgacggagc tggggcgcc tgatgccgag tactggaaca gccagaagga cctcctggag cagaggcggg ccgcggtgga cacctactgc agacacaact acggggttgg tgagagcttc acagtgcagc ggcgag	60 120 180 240 266
<210> 55 <211> 225 <212> DNA <213> Homo sapiens	
<400> 55 tgagtgtcat ttcttcaacg ggacggagcg ggtgcggttc ctggacagat acttctatca ccaagaggag tacgtgcgct tcgacagcga cgtgggggag taccgggcgg tgacggagct ggggcggcct agcgccgagt actggaacag ccagaaggac ctcctggagc agaagcggc cgcggtggac acctactgca gacacaacta cggggttggt gagag	60 120 180 225
<210> 56 <211> 266 <212> DNA <213> Homo sapiens	
<400> 56 tttettggag caggttaaac atgagtgtea tttetteaac gggacggage gggtgeggtt cetggacaga taettetate accaagagga gtacgtgege ttegacageg acgtggggga gtacegggeg gtgacggage tgggggggee tagegeegg taetggaaca gecagaagga ceteetggag cagaggeggg cegeggtgga cacetactge agacacaact acggggttgt ggagagette acagtgeage ggegag	60 120 180 240 266

<211>	370		
<212>	DNA		
<213>	Homo sapiens		
<400>			
atggtgt	ste tgaagtteee tggaggetee tgeatggeag etetgacagt gacactgatg	60	
gtgctga	gct ccccactggc tttggctggg gacacccgac cacgtttctt ggagcaggtt	120	
aaacate	agt gtcatttctt caacgggacg gagcgggtgc ggttcctgga cagatacttc	180	
	lag aggagtacgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg	240	
	ggc ggcctagcgc cgagtactgg aacagccaga aggacctcct ggagcagagg	300	
	agg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg	360	
cagcggc		370	
0080880	5°5		
<210>	58		
<211>	261		
<211>	DNA		
<213>	Homo sapiens		
<b>\213</b> /	rionio sapiens		
<400S	58		
<400>		60	
	gc aggttaaaca tgagtgtcat ttcttcaacg ggacggagcg ggtgcggttc		
	gat acttetatea ceaagaggag taegtgeget tegacagega egtgggggag	120	
	cgg tgacggagct ggggcggcct agcgccgagt actggaacag ccagaaggac	180	
	aag acaggeggge eetggtggae acetaetgea gacacaacta eggggttgtg	240	
gagagct	tca cagtgcagcg g	261	
<210>	59		
<211>	234		
<212>	DNA		
<213>	Homo sapiens		
	•		
<400>	59		
catgagt	gtc atttcttcaa cgggacggag cgggtgcggt tcctggacag atacttctat	60	
	agg agtacgtgcg cttcgacagc gacgtggggg agtaccgggc ggtgacggag	120	
	ggc ctgatgccga gtactggaac agccagaagg acctcctgga gcagaagcgg	180	
	tgg acacctactg cagacacaac tacggggttg tggagagctt caca	234	
8,,8,88			
<210>	60		
<211>	225		
<212>	DNA		
<213>	Homo sapiens		
1210		•	
<400>	60tgagtgtcat ttcttcaacg ggacggagcg ggtgcggttc ctggacagat act	tetatea	60
	ggag tacgtgcgct tcgacagcga cgtgggggag taccgggcgg tgacggagct	120	•
	geet gatgeegagt aetggaacag ceagaaggae ateetggaag aegageggge	180	
	gac acctactgca gacacaacta cggggttggt gagag	225	
cgcggrg	gat acciaciged gatataatia eggggiiggi gagag	220	
<210>	61		
<211>	250		
<211><212>	DNA		
<213>	Homo sapiens		
~100s	61		
<400>	61	60	
	ett ggagcaggtt aaacatgagt gtcatttett caacgggacg gagcgggtge	60	
ggttcct	gga cagatactic tatcaccaag aggagtacgt gcgcttcgac agcgacgtgg	120	
	accg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga	180	
	cct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg	240	
ttgtgga	gag	250	

-010-		
<210><211>	62 222	· ·
<212>	DNA	
<213>	Homo sapiens	
<400×	69	
<400>	62 tea tttetteaac gggaeggage gggtgeggtt eetggaeaga tacttetate	60
	agga gtacgtgcgc ttcgacagcg acgtggggga gtaccgggcg gtgacggagc	120
	gec tgatgeccag tactggaaca gecagaagga ceteetggag cagaageggg	180
ccgcggt	gga cacctactge agacacaact acggggttgg tg	222
<210>	63	
<211>	221	
<212>	DNA	
<213>	Homo sapiens	
<400>	63	
	tca tttcttcaac gggacggagc gggtgcggtt cctggacaga tacttctatc	60
	agga gtacgtgcgc ttcgacagcg acgtggggga gtaccgggcg gtgacggagc	120
	ggec tagegeegag taetggaaca gecagaagga ceteetggag cagaggeggg gga cacetaetge agacacaact aeggggttgg t	$\begin{array}{c} 180 \\ 221 \end{array}$
ccgaggi	sea cacciacies abacacaaci aceeseines i	221
0.10		
<210><211>	64 238	
<211><212>	DNA	
<213>	Homo sapiens	
<400>	64	60
	gtca tttcttcaac gggacggagc gggtgcggtt cctggacaga tacttctatc agga gtacgtgcgc ttcgacagcg acgtggggga gtaccgggcg gtgacggagc	120
	ggcc tgatgccgag tactggaaca gccagaagga catcctggaa gacaggcggg	180
	gga cacctactge agacacaact acggggttgt ggagagette acagtgca	238
<210>	65	
<211>	266	
<212>	DNA	
<213>	Homo sapiens	
<400>	65	
	gag caggttaaac atgagtgtca tttcttcaac gggacggagc gggtgcggtt	60
	eaga tacttetate accaagagga gteegtgege ttegacageg acgtggggga	120
	ggeg gtgacggage tggggcggcc tgatgccgag tactggaaca gccagaagga	180
_	gag cagaggcggg ccgcggtgga cacctactgc agacacaact acggggttgg	240 266
igagag	cttc acagtgcagc ggcgag	200
<210>		
<211><212>	222 DNA	
<213>		
<400>	66	60
	gtca tttcttcaac gggacggagc gggtgcggtt cctggacaga tacttctatc agga gtccgtgcgc ttcgacagcg acgtggggga gtaccgggcg gtgacggagc	120
	ggcc tgatgccgag tactggaaca gccagaagga cctcctggag cagaggcggg	180
	tgga cacctactgc agacacaact acggggttgg tg	222

<210>	67		
<211>	249		
<212>	DNA		
<213>	Homo sapiens		
-10	,		
<400>	67		
	gtta aacatgagtg tcatttcttc aacgggacgg agcgggtgcg gttcctggac	60	
	tct atcaccaaga ggagtccgtg cgcttcgaca gcgacgtggg ggagtaccgg	120	
	cgg agetggggcg geetgatgee gagtaetgga acagecagaa ggaceteetg	180	
	age gggeegegt ggaeacetae tgeagaeaea actaeggggt tggtgagage	240	
ttcacag		249	
	-0		
<210>	68		
<211>	246		
<212>	DNA		
<213>	Homo sapiens		
	·		
<400>	68		
gagcag	gtta aacatgagtg tcatttcttc aacgggacgg agcgggtgcg gttcctggac	60	
agatact	tct atcaccaaga ggagtacgtg cgcttcgaca gcgacgtggg ggagtaccgg	120	
gcggtga	cgg agetgggggg geetgatgee gagtaetgga acagecagaa ggaceteetg	180	
gagcaga	aage ggggeegggt ggacaactae tgeagacaea actaeggggt tgtggagage	240	
ttcaca		246	
<210>	69		
<211>	270		
<212>	DNA		
<213>	Homo sapiens		
<100×	69		
<400>		60	
	ett ggagcaggtt aaacatgagt gtcatttett caacgggacg gagcgggtge	120	
	gga cagataette tateaceaag aggagtaegt gegettegae agegaegtgg aceg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacageeaga	180	
	acct ggagcagagg cgggccgcgg tggacaccta ctgcagacac aactacgggg	240	
	gag attcacagtg cagcggcgag	270	
t t b t b b b a	and anterest of page and page		
<210>	70		
<211>	270		
<212>	DNA		
<213>	Homo sapiens		
	•		
<400>	70cacgtttctt ggagcaggtt aaacatgagt gtcatttctt caacgggacg gagc	gggtgc	60
	gga cagatacttc tatcaccaag aggagtacgt gcgcttcgac agcgacgtgg	120	
gggagta	accg ggcggtgacg gagctggggc ggcctagcgc cgagtactgg aacagccaga	180	
aggacct	cct ggagcggagg cgggccgcgg tggacaccta ctgcagacac aactacgggg	240	
ttggtga	gag cttcacagtg cagcggcgag	270	
<210>	71		
<211>	242		
<212>	DNA		
<213>	Homo sapiens		
Z4005	71		
<400>	71	60	
	agg ttaaacatga gtgtcatttc ttcaacggga cggagcggt gcggttcctg	120	
	tact tetateacea agaggagtae gtgcgetteg acagegaegt ggggggagtae	180	
of accel	gtga cggagctggg gcggcctgat gccgagtact ggaacagcca gaaggacttc	240	
	gaca ggcgggccct ggtggacacc tactgcagac acaactacgg ggttgtggag	240	
ag		272	

	••	
<211>	270	
<212>	DNA	
<213>	Homo sapiens	
<400>	76	
cacgttte	tt ggagcaggtt aaacatgagt gtcatttett caacgggacg gagcgggtgc	60
ggttcctg	gga cagatactic tatcaccaag aggagtacgt gcgcttcgac agcgacgtgg	120
	accg ggtggtgacg gagctggggc ggcctagcgc cgagtactgg aacagccaga	180
aggacct	cct ggagcagagg cgggccgcgg tggacaccta ctgcagacac aactacgggg	240
	gag cttcacagtg cagcggcgag	270

<210> <211> <212> <213>	77 270 DNA Homo sapiens		
ggtteetg gggagta aggaeet	77  tt ggagcaggtt aaacatgagt gtcatttett caaegggaeg gagegggtge gga cagataette tateaceaag aggagtaegt gegettegae agegaegtgg aceg ggeggtgaeg gagetggge ggeetgatge egagtaetgg aaeageeaga eet ggageagagg egggeeetgg tggaeaceta etgeagaeae aaetaegggg gag etteaeagtg eageggegag	60 120 180 240 270	
<210><211><211><212><213>	78 240 DNA Homo sapiens		
gacagat cgggcgg	78 agg ttaaacatga gtgtcatttc ttcaacggga cggagcgggt gcggttcctg act tctatcacca agaggagtac gtgcgcttcg acagcgacgt gggggagtac tga cggagctggg gcggcctgat gccgagtact ggaacagcca gaaggacctc aga ggcaggccgc ggtggacacc tactgcagac acaactacgg ggttgtggag	60 120 180 240	
<210> <211> <212> <213>	79 270 DNA Homo sapiens		
ggtteetg gggagta aggaeet	79  tt ggagcaggtt aaacatgagt gtcatttett caaegggaeg gagegggtge gga eagataette tateaceaag aggagtaegt geaettegae agegaegtgg leeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aaeageeaga eet ggageagaag egggeegeg tggaeaceta etgeagaeae aaetaegggg gag etteaeagtg eageggegag	60 120 180 240 270	
<210> <211> <212> <213>	80 243 DNA Homo sapiens		
gtaccgg	· · · · · · · · · · · · · · · · · · ·	geggtt 120 180 240 243	60
<210> <211> <212> <213>	81 260 DNA Homo sapiens		
ggttcctg gggagtt aggacct	81 ctt ggagcaggtt aaacatgagt gtcatttett caacgggacg gagcgggtge gga cagatactte tateaceaag aggagtacgt gegettegae agegacgtgg ceg ggeggtgacg gagetgggge ggeetgatge egagtactgg aacageeaga cet ggagcagaag egggeegegg tggacaceta etgeagacae aactaegggg gag etteacagtg	60 120 180 240 260	

<210>	82	
<211>	270	
<212>	DNA	
<213>	Homo sapiens	
<400>	82	
	tt ggagcaggtt aaacatgagt gtcatttctt caacgggacg gagcgggtgc	60
ggttcctg	ga cagatacttc tatcaccaag aggagtacgt gcgcttcgac agcgacgtgg	120
gggagta	accg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga	180
	cct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg	240
ttgtgga	gag cttcacagtg cagcggcgag	270
<210>	83	
<211>	270	
<212>	DNA	
<213>	Homo sapiens	
<100>	00	
<400>	83 ett ggagcaggtt aaacatgagt gtcatttett caaegggaeg gagegggtge	60
	gga cagatacttc tatcaccaag aggagtacgt gcgcttcgac agcgacgtgg	120
	accg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga	180
	cct ggaagacgag cgggccgcgg tggacaccta ctgcagacac aactacgggg	240
~~	gag cttcacagtg cagcggcgag	270
.010:	0.4	
<210>	84 270	
<211><212>	DNA	
<213>	Homo sapiens	
<b>\213</b> /	110mo sapiens	
<400>	84	
cacgttte	ett ggagcaggtt aaacatgagt gtcatttett caaegggaeg gagegggtge	60
	gga cagatacttc tatcaccaag aggagtacgt gcgcttcgac agcgacgtgg	120
	accg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga	180
	teet ggagcagaag egggeegegg tggacaceta etgeagacae aactaegggg	240
ttggtga	gag etteacagtg cageggegag	270
<210>	85 .	
<211>	266	
<212>	DNA	
<213>	Homo sapiens	
<400>	85	
cacgttte	ctt ggagcaggtt aaacatgagt gtcatttctt caacgggacg gagcgggtgc	60
	gga cagatactic tatcaccaag aggagtacgt gcgcticgac agcgacgtgg	120
gggacta	accg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga	180
	cct ggagcagagg cgggccgagg tggacaccta ctgcagacac aactacgggg	240
ttgtgga	gag cttcacagtg cagcgg	266
<210>	86	
<211>	266	
<212>	DNA	
<213>	Homo sapiens	
<400>	86	
	ctt ggagcaggtt aaacatgagt gtcatttett caaegggaeg gagegggtge	60
ggttcct	gga cagatacttc tatcaccaag aggagtacgt gcgcttcgac agcgacgtgg	120
gggagt	accg ggcggtgacg gagctggggc ggcctgatgg cgagtactgg aacagccaga	180
	teet ggageagagg egggeegegg tggacaceta etgeagacae aactaegggg	240
ttgtgga	gag cttcacagtg cagcgg	266

	0007702	
<210><211><211><212>	87 266 DNA	
<213>	Homo sapiens	
ggtteetg gggagta aggaeet	87 Ett ggagcaggtt aaacatgagt gtcatttett caacgggacg gagcgggtge gga cagatactte tateaceaag aggagaacgt gegettegac agegacgtgg accg ggcggtgacg gagctgggge ggcctgatge egagtactgg aacagceaga cet ggagcagagg egggccgagg tggacaceta etgcagacac aactacgggg gag etteacagtg cagegg	60 120 180 240 266
<210>	88	
<211>	270	
<212> <213>	DNA Homo sapiens	
<400>	88	
cacgttto ggttcctg gggagtt aggacct	ctt ggagcaggtt aaacatgagt gtcatttett caacgggacg gagcgggtge gga cagatactte tateaceaag aggagtaegt gegettegae agegaegtgg eeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacageeaga eet ggagcagagg egggeegegg tggacaceta etgeagaeae aactaegggg gag etteacagtg eageggegag	60 120 180 240 270
<210>	89	
<211>	266	
<212>	DNA	
<213>	Homo sapiens	
ggttcctg gggagtt aggacct	89 ctt ggagcaggtt aaacatgagt gtcatttctt caacgggacg gagcgggtgc gga cagatacttc tatcaccaag aggagtacgt gcgcttcgac agcgacgtgg ccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga cct ggagcagagg cgggccgcgg tggacaccta ctgcagacac aactacgggg gag cttcacagtg cagcgg	60 120 180 240 266
<210>	90	
<211>	264	
<212>	DNA	
<213>	Homo sapiens	
gggagta aggacci	90cacgtttett ggagcaggtt aaacatgagt gtcatttett caacgggacg gag gga cagatactte tatcaccaag aggagtacgt gegettegae agegaegtgg accg ggeggtgacg gagetgggge ggeetgatge egagtactgg aacagecaga ect ggagcagagg egggeegegg tggacaatta etgeagacae aactaegggg gag etteacagtg eage	120 180 240 264
<210>	91	
<211>	370	
<212>	DNA	
<213>	Homo sapiens	
<400>	91	
	gtc tgaagctccc tggaggctcc tgcatggcag ctctgacagt gacactgatg	60
gtgctga	get ecceaetgge tttggetggg gacacccaac caegttteet gtggcagggt	120 180
tataace	agt gtcatttett caacgggacg gagcgggtge agtteetgga aagactette agg aggagttegt gegettegae agegaegtgg gggagtaceg ggeggtgacg	240

gagetaggge ggeetgtege egagteetgg aacageeaga aggacateet ggaggacagg eggggeeagg tggacacegt gtgcagacac aactaegggg ttggtgagag etteacagtg eageggegag	300 360 370
<210> 92 <211> 246 <212> DNA <213> Homo sapiens	
<400> 92 cacgtttcct gtggcagggt aaatataagt gtcatttctt caacgggacg gagcgggtgc agttcctgga aagactette tataaccagg aggagttcgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctaggge ggcctgtcgc cgagtcctgg aacagccaga aggacatcct ggaggacagg cggggccagg tggacaccgt gtgcagacac aactacgggg ttggtg	60 120 180 240 246
<210> 93 <211> 246 <212> DNA <213> Homo sapiens	
<400> 93 cacgttteet gtggcagggt aagtataagt gtcatttett caacgggacg gagcgggtgc agtteettgga aagtetette tataaccagg aggagttegt gegettegae agegagtgge gggagtaecg ggcggtgaeg gagctaggge ggcetgtege egagteetgg aacagceaga aggacateet ggaggacagg eggggecagg tggacaccgt gtgcagacae aactaegggg ttggtg	60 120 180 240 246
<210> 94 <211> 247 <212> DNA <213> Homo sapiens	
<400> 94 tttcctgtgg cagggtaagt ataagtgtca tttcttcaac gggacggagc gggtgcagtt cctggaaaga ctcttctata accaggagga gttcgtgcgc ttcgacagcg acgtggggga gtaccgggcg gtgacggagc tagggcggcc tgtcgccgag tcctggaaca gccagaagga catcctggag gacaggcggg gccaggtgga caattactgc agacacaact acggggttgg tgagagc	60 120 180 240 247
<210> 95 <211> 258 <212> DNA <213> Homo sapiens	-
<400> 95 cacgtttcct gtggcagggt aagtataagt gtcatttctt caacgggacg gagcgggtgc agttcctgga aagactcttc tataaccagg aggagttcgt gegettcgac agcgacgtgg gggagtaccg ggcggtgacg gagctagggc ggcctgtcgc cgagtcctgg aacagccgga aggacatcct ggaggacagg cggggccagg tggacaccgt gtgcagacac aactacgggg ttggtgagag cttcacag	60 120 180 240 258
<210> 96 <211> 250 <212> DNA <213> Homo sapiens	

	·
<400> 96 cacgtttcct gtggcagggt aagtataagt gtcatttctt caacgggacg gagcgggtgc agttcctgga aagactcttc tataaccagg aggagttcgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctagggc ggcctgctgc ggagtactgg aacagccaga aggacatcct ggaggacagg cggggccagg tggacaccgt gtgcagacac aactacgggg ttggtgagag	60 120 180 240 250
<210> 97 <211> 260 <212> DNA <213> Homo sapiens	
<400> 97 cacetttcct gtggcagggt aagtataagt gtcatttctt caacgggacg gagcgggtgc agttcctgga aagactcttc tataaccagg aggagttcgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctagggt ggcctgtcgc cgagtcctgg aacagccaga aggacatcct ggaggacagg cggggccagg tggacaccgt gtgcagacac aactacgggg ttggtgagag cttcacagtg	60 120 180 240 260
<210> 98 <211> 283 <212> DNA <213> Homo sapiens	
<400> 98 ggggacaccc gaccacgttt cttggagtac tetacgggtg agtgttattt etteaatggg acggageggg tgeggtteet ggacagatac ttetataacc aagaggagta egtgegette gacagegacg tgggggagta eegggeggtg acggagetgg ggeggeetag egeeggatac tggaacagec agaaggaett eetggaagae aggegggeee tggtggacac etactgeaga cacaactacg gggttggtga gagetteacg gtgeagegge gag	60 120 180 240 283
<210> 99 <211> 270 <212> DNA <213> Homo sapiens	
<400> 99 cacgtttctt ggagtactct acgggtgagt gttatttctt caatgggacg gagcgggtgc ggttcctgga cagatatttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctagcgc cgagtactgg aacagccaga aggacttcct ggaagacagg cgggccctgg tggacaccta ctgcagacac aactacgggg ttggtgagag cttcacggtg cagcggcgag	60 120 180 240 270
<210> 100 <211> 370 <212> DNA <213> Homo sapiens	
<400> 100atggtgtgtc tgaggctcc tggaggctcc tgcatggcag ttctgacagt ga gtgctgagct ccccactggc tttggctggg gacaccagac cacgtttctt ggagtactct acgggtgagt gttatttctt caatgggacg gagcgggtgc ggttcctga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga aggacttcct ggaagacagg cgggccctgg tggacaccta ctgcagacac aactacgggg ttggtgagag cttcacggtg cagcggcgag	cactgatg 60 120 180 240 300 360 370
<210> 101 <211> 270	

<212> <213>	DNA Homo sapiens	
ggttcctg gggagta aggactt	tt ggagtactet acgggtgagt gttatttett caatgggacg gagcgggtge ga cagatactte tataaccaag aggagtacgt gcgettegae agegacgtgg accg ggcggtgacg gagetggge ggeetgatge egagtactgg aacagecaga eet ggaagacagg egggeeetgg tggacaceta etgeagacae aactaegggg gag etteacagtg eageggegag	60 120 180 240 270
<210>	102	
<211>	258	
<212> <213>	DNA Homo sapiens	
1210	Tiomo sapieno	
tteetgga gagtace gaetteet	102 gg agtactctac gggtgagtgt tatttcttca atgggacgga gcgggtgegg aca gatacttcta taaccaagag gagtacgtge gcttcgacag cgacgtgggg ggg cggtgacaga gctggggcgg cetgatgecg agtactggaa cagccagaag ggg aagacaggcg ggccetggtg gacacctact gcagacacaa ctacggggtt agct tcacggtg	60 120 180 240 258
<210>	103	
<211>	283	
<212>	DNA	
<213>	Homo sapiens	
acggago gacagog tggaaca	103 acca gaccacgttt cttggagtac tctacgggtg agtgttattt cttcaatggg eggg tgcggttcct ggacagatac ttctataacc aagaggagta cgtgcgcttc gacg tgggggagta ccgggcggtg acggagctgg ggcggcctag cgccgagtac agcc agaaggacat cctggaagac aggcggccc tggtggacac ctactgcaga acg gggttggtga gagcttcaca gtgcagcggc gag	60 120 180 240 283
<210>	104	
<211>	283	
<212><213>	DNA Hama caniana	
<b>\</b> 215/	Homo sapiens	
<400>	104	00
acggage gacagcg tggaaca	acca gaccacgttt ettggagtae tetaegggtg agtgttattt etteaatggg eggg tgeggtteet ggacagatae ttetataace aagaggagta egtgegette gacg tgggggagta eegggeggtg aeggagetgg ggeggeetga tgeegagtae agec agaaggaett eetggaagae aggegggeee tggtggaeae etaetgeaga acg gggttgtgga gagetteaea gtgeagegge gag	60 120 180 240 283
<210>	105	
<211>	228	
<212> <213>	DNA Homo sapiens	
<400>	105	60
gtgeget	gga cggagcgggt gcggttcctg gacagatact tctataacca agaggagtac tcg acagcgacgt gggggagtac cgggcggtga cggagctggg gcggcctgat	120
gccgag	tact ggaacageca gaaggactte etggaagaca ggegggeeet ggtggacace	180
	gac acaactacgg ggttgttgag agcttcacag tgcagcgg	228

<210> 106 <211> 269 <212> DNA <213> Homo sapiens <400> 106 cacgttctt ggagtactct acgggtgagt gttatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc tataaccaag aggagtactg gcgcttcgac agcgacgtgg ggagtaccg ggcggtgacg gagctgggc ggcctgatgc cgagtactgg aacagcaga aggacttcct ggaagacag cgggcctgg tggacaccta ctgcagaca aactacgggg ttgttgagag cttcacggtg cagcggcga	60 120 180 240 269
<210> 107 <211> 270 <212> DNA <213> Homo sapiens	
<400> 107 cacgtttctt ggagtactct acgggtgagt gttatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg ggagtaccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga aggacttcct ggaagacagg cgggccctgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacggtg cagcggcgag	60 120 180 240 270
<210> 108 <211> 245 <212> DNA <213> Homo sapiens	
<400> 108 cacgtttett ggagtaetet aegggtgagt gttatttett eaatgggaeg gagegggtge ggtteetgga eagataette tataaceaag aggagtaegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetggge ggeetagege egagtaetgg aacageeaga aggaetteet ggaagaeagg egggeegegg tggaeaceta etgeagaeae aactaegggg ttggt	60 120 180 240 245
<210> 109 <211> 271 <212> DNA <213> Homo sapiens	
<400> 109 ccacgtttct tggagtactc tacgggtgag tgttatttct tcaatgggac ggagcgggtg cggttcctgg acagatactt ctataaccaa gaggagtacg tgcgcttcga cagcgacgtg ggggagtacc gggcggtgac ggagctgggg cggcctagcg ccgagtactg gaacagccag aaggacttcc tggaagacag gcgggccctg gtggacacct actgcagaca caactacggg gttgtggaga gcttcacagt gcagcggcga g	60 120 180 240 271
<210> 110 <211> 270 <212> DNA <213> Homo sapiens	

 $<\!\!400\!\!> 110 cacgtttett ggagtaetet acgggtgagt gttatttett ea<\!\!atgggacg gagegggtge$ 

ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctgttgc cgagtactgg aacagccaga 120

180

<210> 111	
<211> 240	
<212> DNA	
<213> Homo sapiens	
<400> 111	•
ttggagtact ctacgggtga gtgttatttc ttcaatggga cggagcgggt gcggttcc	tg 60
gacagatact tctataacca agaggagtac gtgcgcttcg acagcgacgt ggggga	
cgggcggtga cggagctggg gcggcctgct gcggagcact ggaacagcca gaagg	
ctggaagaca ggcgggccct ggtggacacc tactgcagac acaactacgg ggttgg	
onflandary floreflores floreflands manhander floreflore	<b>15</b> 00
<210> 112	
<211> 270	
<212> DNA	
<213> Homo sapiens	•
,400, 110	
<400> 112	00
cacgtttctt ggagtactct acgggtgagt gttatttctt caatgggacg gagcgggt	
ggttcctgga cagatacttc cataaccagg aggagttcgt gcgcttcgac agcgacg	
gggagtaccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacag	
aggactteet ggaagacagg egggeeetgg tggacaceta etgeagacae aactae	gggg 240
ttggtgagag cttcacggtg cagcggcgag	<b>27</b> 0
<210> 113	
<211> 270	
<212> DNA	
<213> Homo sapiens	
alo ilomo ouplone	
<400> 113	
cacgtttett ggagtaetet acgggtgagt gttatttett caatgggaeg gagegggt	gc 60
	O
ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacg	
gggagtaccg ggcgttgacg gagctggggc ggcctagcgc cgagtactgg aacag	
aggacateet ggaagacagg egggeeetgg tggacaceta etgeagacac aactae	
ttgtggagag cttcacagtg cagcggcgag	270
1010- 114	•
<210> 114	•
<211> 260	
<212> DNA	
<213> Homo sapiens	
<400> 114	
cacgtttett ggagtaetet acgggtgagt gttatttett caatgggaeg gagegggt	gc 60
ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacg	tgg 120
gggagtaccg ggcggtgacg gagctggggc ggcctgctgc cgagtactgg aacagc	
aggactteet ggaagacagg egggeeetgg tggacaceta etgeagacae aactae	
ttggtgagag cttcacggtg	260
***************************************	
<210> 115	
<210> 115 <211> 270	
<210> 115 <211> 270 <212> DNA	
<210> 115 <211> 270	
<210> 115 <211> 270 <212> DNA <213> Homo sapiens	
<210> 115 <211> 270 <212> DNA	gc 60

0

120

180

240

cacgtttctt ggagtactct acgggtgagt gttatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctagcgc cgagtactgg aacagccaga aggacatect ggaagacagg egggeeetgg tggacaceta etgeagacae aactaegggg

ctgtggagag cttcacagtg cagcggcgag	270
<210> 116 <211> 254 <212> DNA <213> Homo sapiens	
<400> 116 tettggagta etetaeggt gagtgttatt tetteaatgg gaeggagegg gtgeggttee tggaeagata ettetataac caagaggagt aegtgegett egaeagegae gtggggagt aeegggeggt gaeggagetg gggeggeetg atgeeggata etggaacage eagaaggaee teetggaaga eaggegggee etggtggaea eetaetgeag aeacaactae ggggttggtg agagetteae ggtg	60 120 180 240 254
<210> 117 <211> 260 <212> DNA <213> Homo sapiens	
<400> 117 cacgtttett ggagtaetet aggggtgagt gttatttett eaatgggaeg gagegggtge ggtteetgga eagataette tataaceaag aggagtaegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetagege egagtaetgg aacageeaga aggaeateet ggaagaeagg egggeeetgg tggaeaceta etgeagaeae aactaegggg ttggtgagag etteaeagtg.	60 120 180 240 260
<210> 118 <211> 242 <212> DNA <213> Homo sapiens	
<400> 118 tttcttggag tactctacgg gtgagtgtta tttcttcaat gggacggagc gggtgcggtt cctggacaga tactctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gtaccgggcg gtgacggagc tggggcggcc tgatgcggag cactggaaca gccagaagga catcctggaa gacaggcggg ccctggtgga cacctactgc agacacaact acggggttgg tg	60 120 180 240 242
<210> 119 <211> 270 <212> DNA <213> Homo sapiens	
<400> 119 cacgtttett ggagtaetet acgggtgagt gttatttett caatgggacg gagegggtge ggtteetgga cagataette tataaccaag aggaggaegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetagege egagtaetgg aacagecaga aggaetteet ggaagaeagg egggeeetgg tggaeaceta etgeagaeae aactaegggg ttggtgagag etteaeggtg eageggegag	60 120 180 240 270
<210> 120 <211> 246 <212> DNA <213> Homo sapiens	
<400> 120cacgtttett ggagtaetet acgggtgagt gttatttett eaatgggaeg gagtteetgga cagataette tataaccaag aggagtaegt gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetgggge ggeetagege egagtaetgg aacageeaga	gcgggtgc 60 120 180

aggactteet ggaagacagg egggeeetgg tggacaceta etgeagacac aactaegggg ttggtg	240 246
<210> 121 <211> 270 <212> DNA <213> Homo sapiens	
<400> 121 cacgtttctt ggagtactct acgggtgagt gttatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg ggagtaccg ggcgtgacg gagctgggc ggcctagcgc cgagtactgg aacagccaga aggacatcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttggtgagag cttcacagtg cagcggcgag <210> 122 <211> 257 <212> DNA	60 120 180 240 270
<213> Homo sapiens <400> 122 tttettggag tactetacgg gtgagtgtta tttetteaat gggacggage gggtgeggtt cetggacaga tactetata accaagagga gtacgtgege ttegacageg acgtgggga gtacegggeg gtgacggage tggggeggee tategeegag tactggaaca gecagaagga cateetggaa gacaggegg ceetggtgga cacetactge agacacaact acggggttgg tgagagette acagtge	60 120 180 240 257
<210> 123 <211> 269 <212> DNA <213> Homo sapiens <400> 123 cacegtttett ggagtaetet aegtetgagt gteatttett caatgggaeg gagegggtge ggtteetgga eagataette tataaceaag aggagtaegt gegettegae agegaegtgg ggagtaeeg ggeggtgaeg gagetggge ggeetgatge eagataetgg aaeageeaga aggaetteet ggaagaeag eggeeetgg tggaeaceta etgeagaea aaeageeaga ttgtggagag etteacagtg eageggega	60 120 180 240 269
<210> 124 <211> 269 <212> DNA <213> Homo sapiens  <400> 124 cacgtttett ggagtaetet atgggtgagt gttatttett caatgggaeg gagegggtge ggtteetgga cagataette cataaccagg aggagttegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetggge ggeetgatge eggtaetgg aacagecaga aggaetteet ggaagaeag egggeettgg tggaeaceta etgeagaeae aactaegggg ttggtgagag etteaeggtg eageggega	60 120 180 240 269
<210> 125 <211> 270 <212> DNA <213> Homo sapiens	

<400> 125 cacgtttett ggagtactet acgggtgagt gttatttett caatgggaeg gagegggtge ggtteetgga cagatactte tataaccaag aggagtacgt gegettegae agegaegtgg gggagtaceg ggeggtgaeg gagetgggge ggeetagege egagtactgg aacagecaga aggaetteet ggaagacagg egggeeetgg tggaeaceta etgeagaeae aactaegggg etgtggaga etteaeggtg eageggegag	60 120 180 240 270
<210> 126 <211> 270 <212> DNA <213> Homo sapiens	
<400> 126 cacgtttett ggagtaetet acgggtgagt gttatttett caatgggacg gagegggtge ggtteetgga cagataette tataaccaag aggagtaegt gegettegae agegaegtga gggagtaeeg ggeggtgaeg gagetggge ggeetagege egagtaetgg aacageeaga aggaeateet ggaagaeagg egggeeetgg tggaeaceta etgeagaea aactaegggg ttggtgagag etteacagtg eageggegag	60 120 180 240 270
<210> 127 <211> 266 <212> DNA <213> Homo sapiens	
<400> 127 cacgtttett ggagtactet acgggtgagt gttatttett caatgggacg gagegggtge ggtteetgga cagatactte tataaccaag aggagtacgt gegettegae agegaegtgg gggagtaceg ggeggtgacg gagetgggge ggeetgatge egagtactgg aacagecaga aggaetteet ggaagacagg egggeegegg tggacaceta etgeagacae aactaegggg ttggtgagag etteacagtg eagegg	60 120 180 240 266
<210> 128 <211> 283 <212> DNA <213> Homo sapiens	
<400> 128	
ggggacacce aaccacgttt ettgaagcag gataagtttg agtgteattt etteaaeggg acggageggg tgeggtatet geacagagge atetataace aagaggagaa egtgegette gacagegacg tgggggagta eegggeggtg acggagetgg ggeggeetgt egeegagtee tggaacagee agaaggaett eetggagegg aggegggeeg aggtggacae egtgtgeaga eacaactaeg gggttggtga gagetteaca gtgeagagge gag	60 120 180 240 283
<210> 129 <211> 270 <212> DNA <213> Homo sapiens	
<400> 129 cacgtttett gaagcaggat aagtttgagt gteatttett caacgggaeg gagegggtge ggtatetgea cagaggeate tataaccaag aggagaacgt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetgaege tgagtaetgg aacagecaga aggaetteet ggageggagg egggeegagg tggaeacegt gtgeagaeae aactaegggg ttggtgagag etteacagtg eagaggegag	60 120 180 240 270
<210> 130 <211> 370 <212> DNA	

<213> Homo sapiens
<400> 130 atggtgtgtc tgaggetee tggaggetee tgeatggeag ttetgacagt gacactgatg gtgetgaget ecceaetgge tttggetggg gacaccagae eacgtttett ggaggaggtt 120 aagtttgagt gteatttett caacgggaeg gagegggtge ggttgetgga aagacgegte 180 cataaccaag aggagtaege gegetaegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetgatge eggetgage 240 gagetgggge ggeetgatge egagtaetgg aacageeaga aggaceteet ggageggagg egtgeegeg tggacaccta etgeagaea aactaegggg ttggtgagag etteacagtg 360 cageggegag 370
<210> 131 <211> 270 <212> DNA <213> Homo sapiens
<400> 131 cacgtttett ggaggaggtt aagtttgagt gteatttett eaaegggaeg gagegggtge 60 ggttgetgga aagaegegte cataaceaag aggagtaege gegetaegae agegaegtgg 120 gggagtaeeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aaeageeaga 180 aggaecteet ggageggagg egegeegegg tggaeaceta etgeagaeae aaetaegggg 240 etggtgagag etteaeagtg eageggegag 270
<210> 132 <211> 370 <212> DNA <213> Homo sapiens
Atggtgtgtc tgaggctcc tggaggctcc tgcatggcag ttctgacagt gacactgatg  atggtgtgtc tgaggctccc tggaggctcc tgcatggcag ttctgacagt gacactgatg  atggtgtgtc tgaggctccc tggaggctcc tgcatggcag ttctgacagt gacactgatg  atgettgagct ccccactggc tttggctggg gacaccagac cacgtttctt ggagtactct  120  acgtctgagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc  180  ataaaccaag aggagtacgt gcgcttcgac agcacgtgg gggagttccg ggcggtgacg  240  aggctggggc ggcctgatga ggagtactgg aacagccaga aggacttcct ggaagacagg  300  360  aggcgcgag  370
\$\frac{210}{211}  \text{133} \\ \frac{2212}{212}  \text{DNA} \\ \frac{2213}{213}  \text{Homo sapiens} \end{array}\$
gggacacca gaccacgttt cttggagtac tctacgtctg agtgtcattt cttcaatggg 60 leggagcggg tgeggttcct ggacagatac ttctataacc aagaggagta egtgegettc 120 gacageacg tgggggagtt eegggeggt aeggagetgg ggeggeetga tgaggagtac 180 ggaacagcc agaaggactt eetggaagac aggeggeeg eggtggacac etactgeaga 240 acaactacg gggttggtga gagettcacg gtgcagegg gag 283
2210> 134 2211> 270 2212> DNA 2213> Homo sapiens
acgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge 60 gtteetgga eagataette tataaceaag aggagtaegt gegettegae agegaegtgg 120 ggagtteeg ggeggtgaeg gagetgggge ggeetgatga ggagtaetgg aacageeaga 180 ggaetteet ggaagaeagg egegeegeg tggaeaceta etgeagaeae aactaeggg 240

ttggtgagag cttcacagtg cagcggcgag	270
<210> 135 <211> 268 <212> DNA <213> Homo sapiens	
<400> 135 cgtttcttgg agtactctac gtctgagtgt catttcttca acgggacgga gcgggtgcgg ttcctggaca gatacttcta taaccaagag gagtacgtgc gcttcgacag cgacgtgggg gagttccggg cggtgacgga gctggggcgg cctgatgagg agtactggaa cagccagaag gacttcctgg aagacaggcg ggccgcggtg gacacctact gcagacacaa ctacggggtt ggtgagagct tcacagtgca gcggcgag	60 120 180 240 268
<210> 136 <211> 283 <212> DNA <213> Homo sapiens	
<400> 136 ggggacacca gaccacgttt cttggagtac tctacgtctg agtgtcattt cttcaatggg acggagcggg tgcggttcct ggacagatac ttctataacc aagaggagta cgtgcgcttc gacagcgacg tgggggagtt ccgggcggtg acggagctgg ggcggcctga tgaggagtac tggaacagcc agaaggacat cctggaagac gagcggccg cggtggacac ctactgcaga cacaactacg gggttgtgga gagcttcaca gtgcagcggc gag	60 120 180 240 283
<210> 137 <211> 370 <212> DNA <213> Homo sapiens	
<400> 137 atggtgtgtc tgaggctcc tggaggctcc tgcatggcag ttctgacagt gacactgatg gtgctgagct ccccactggc tttggctggg gacaccagac cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga aggacttcct ggaagacgag cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag	60 120 180 240 300 360 370
<210> 138 <211> 370 <212> DNA <213> Homo sapiens	
<400> 138 atggtgtgtc tgaggctcc tggaggctcc tgcatggcag ttctgacagt gacactgatg gtgctgagct ccccactggc tttggctggg gacaccagac cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga aggacttcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcag	60 120 180 240 300 360 370
<210> 139 <211> 283 <212> DNA <213> Homo sapiens	

<400> 139 ggggacacca gaccacgttt cttggagtac tetacgtetg agtgtcattt cttcaatggg acggagcggg tgcggttcct ggacagatac ttctataacc aagaggagta cgtgcgettc gacagcgacg tgggggagtt ccgggcggtg acggagctgg ggcggcctga tgaggagtac tggaacagcc agaaggactt cctggaagac aggcgggccg cggtggacac ctactgcaga cacaactacg gggttgtgga gagcttcacg gtgcagcggc gag	60 120 180 240 283	
<210> 140 <211> 270 <212> DNA <213> Homo sapiens	·	
<400> 140ccacgtttct tggagtactc tacgggtgag tgtcatttct tcaatgggac ggacggttcctgg acagatactt ctataaccaa gaggagtacg tgcgcttcga cagcgacgtg ggggagttcc gggcggtgac ggagctgggg cggcctgatg aggagtáctg gaacagccag aaggacttcc tggaagacag gcgggccgcg gtggacacct actgcagaca caactacggg gttggtgaga gcttcacagt gcagcggcga	agcgggtg 6 120 180 240 270	60
<210> 141 <211> 268 <212> DNA <213> Homo sapiens		
<400> 141 cgtttcttgg agtactctac gtctgagtgt catttcttca atgggacgga gcgggtgcgg ttcctggaca gatacttcta taaccaagag gagtacgtgc gcttcgacag cgacgtgggg gagttccggg cggtgacgga gctggggcgg cctgatgagg agtactggaa cagccagaag gacttcctgg aagacaggcg ggccgcggtg gacacctact gcagacacaa ctacggggct gtggagagct tcacagtgca gcggcgag	60 120 180 240 268	
<210> 142 <211> 266 <212> DNA <213> Homo sapiens		
<400> 142 tttcttggag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt cctggacaga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gttccgggcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga cttcctggaa gacaggcggg ccgcggtgga cacctattgc agacacaact acggggctgt ggagagcttc acagtgcagc ggcgag	60 120 180 240 266	
<210> 143 <211> 262 <212> DNA <213> Homo sapiens		
<400> 143 ttggagtact ctacgtctga gtgtcatttc ttcaatggga cggagcgggt gcggttcctg gacagatact tctataacca agaggagtac gtgcgcttcg acagcgacgt gggggagttc cgggcggtga cggagctggg gcggcctgat gaggagtact ggaacagcca gaaggacctc ctggagcaga agcgggccg ggtggacaac tactgcagac acaactacgg ggttgtggag agcttcacag tgcagcggcg ag	120 180 240 262	

<211>	238	
<212>	DNA	
<213>	Homo sapiens	
	·	
<400>	144	
gtctgag	tgt catttettea atgggaegga gegggtgegg tteetggaea gataetteta	<b>60</b> ′
	gag gagtacgtgc gcttcgacag cgacgtgggg gagttccggg cggtgacgga	120
		180
	cgg cctgatgagg agtactggaa cagccagaag gacctcctgg aagacaggcg	
ggccgcg	gtg gacacctact gcagacacaa ctacggggtt ggtgagagct tcacagtg	238
	•	
	•	
<210>	$14\overline{5}$	*
<211>	238	
<212>	DNA	
<213>	Homo sapiens	
12102	Tionio sapiens	
<400>	145	
		CO.
	tgt catttettea atgggaegga gegggtgegg tteetggaea gataetteta	60
taaccaa	gag gagtacgtgc gcttcgacag cgacgtgggg gagttccggg cggtgacgga	120
gctgggg	cgg cctgatgagg agtactggaa cagccagaag gacctcctgg aagacaggcg	180
	gtg gacacctact gcagacacaa ctacggggtt ggtgagagct tcacggtg	238
00 0 0		
<210>	146	
<211>	231	
	DNA	
<212>		
<213>	Homo sapiens	
<400>	146	
catttctt	ca atgggacgga gcgggtgcgg ttcctggaca gatacttcca taaccaggag	<b>6</b> 0
gagaac	gtgc gcttcgacag cgacgtgggg gagttccggg cggtgacgga gctggggcgg	120
	agg agtactggaa cagccagaag gacttcctgg aagacaggcg ggccgcggtg	180
	act gcagacacaa ctacggggtt ggtgagagct tcacagtgca g	231
gacacco	act forfactions conobbbbts beingababos tomonbibon b	201
<210>	147	
<211>	219	
<212>	DNA	
<213>	Homo sapiens	
<400>	147	
gagtgtc	att tetteaatgg gaeggagegg gtgeggttee tggaeagata etteeataac	60
	gagt tegtgegett egacagegae gtgggggagt teegggeggt gaeggagetg	120
	ectg atgaggagta ctggaacagc cagaaggact teetggaaga caggegggec	180
		219
gcggrgg	gaca cetactgeag acacaactae ggggttggt	213
Z010s	140	
<210>	148	
<211>	266	
<212>	DNA	
<213>	Homo sapiens	
	-	
<400>		
	148	
tttettee	<del></del>	60
	gag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt	
cctggac	gag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt gaga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga	120
cctggac gttccgg	gag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt gaga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga	120 180
cctggac gttccgg cttcctgg	gag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt caga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga geg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacgagcggg ccgcggtgga cacctactgc agacacaact acggggttgg	120 180 240
cctggac gttccgg cttcctgg	gag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt gaga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga	120 180

WO 2005	5/063985		599 / 752	-	PCT/JP20	04/019763
<210> <211> <212> <213>	149 219 DNA Homo sapien	s		:		
caagagg gggcggc	gagt tegtgegett eetg atgaggagt	cgacagcgac gt	reggttee tggacagata ogggggggt teeggeggt gaaggaet teetggaag ggttggt	gacggagctg	60 120 180 219	
<210> <211> <212> <213>	150- 270 DNA Homo sapien	s				
gggagtt aggactt	gga cagatacttc ccg ggcggtgac	tataaccagg agg g gagctggggc gg g cgggccgcgg tg	tetgagt gteatttett ea agttegt gegettegae a cetgatga ggagtaetgg gacaceta etgeagaeae	igcgacgtgg g aacagccaga	cgggtgc 120 180 240 270	60
<210> <211> <212> <213>	151 282 DNA Homo sapien	s	*			
acggago gacagog tggaaca	eggg tgeggtteet gaeg tgggggagt igee agaaggaee	ggacagatac tto t ccgggcggtg ac	acgtetg agtgteattt et cataace aggaggagtt ggagetgg ggeggeetga gegggeeg eggtggaea geagegge ga	cgtgcgcttc a tgaggagtac	60 120 180 240 282	
<211> <212>		s				
acggago gacagcg tggaaca	eggg tgeggtteet gaeg tgggggagt agee agaaggaea	ggacagatac tto t ccgggcggtg ac	acgtetg agtgteattt et stataace aagaggagta ggagetgg ggeggeetgs agegggeeg eggtggaea geagegge gag	cgtgcgcttc a tgaggagtac	60 120 180 240 283	
<210> <211> <212> <213>	153 283 DNA Homo sapien	s				

<400> 153	
ggggacacca gaccacgttt cttggagtac tctacgtctg agtgtcattt cttcaatggg	60
acggageggg tgeggtteet ggacagatae ttetataace aagaggagga ettgegette	120
gacagegacg tgggggagtt ccgggcggtg acggagetgg ggcggcetga tgaggagtac	180
tggaacagce agaaggaett eetggaagae aggegggeeg eggtggaeae etaetgeaga	240
cacaactacg gggttggtga gagettcaca gtgcagegge gag	283

~910×	154	
<210>	154	
<211>	270	•
<212>	DNA	
<213>	Homo sapiens	
<400>	154	60
	ett ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge	120
	ga cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg	
	ccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga	180
	cct ggaagacgag cgggccgcgg tggacaccta ctgcagacac aactacgggg	240
ttgtgga	gag cttcacagtg cagcggcgag	270
<210>	155	
<211>	283	
<212>	DNA	
<213>	Homo sapiens	
<400>	155	
	acca gaccacgttt cttggagtac tctacgtctg agtgtcattt cttcaatggg	60
		120
	eggg tgcggttcct ggacagatac ttccataacc aggaggagtt cgtgcgcttc	180
	acg tggggggta ccgggcggtg acggagctgg ggcggcctga tgaggagtac	
	gcc agaaggacct cctggagcgg aggcgggccg aggtggacac ctattgcaga	240
cacaact	acg gggttgtgga gagcttcaca gtgcagcggc gag	283
<210>	156	
<211>	266	<i>;</i>
<212>	DNA	
<213>	Homo sapiens	
-210-	TOMO Buptons	
<400>	150	
	156	
<400>	156	60
tttcttgg	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt	60
tttcttgg cctggac	ag tactetaegt etgagtgtea tttetteaat gggaeggage gggtgeggtt aga taettetata accaagagga gtaegtgege ttegaeageg aegtggggga	120
tttcttgg cctggac gttccgg	ag tactetaegt etgagtgtea tttetteaat gggaeggage gggtgeggtt aga taettetata accaagagga gtaegtgege ttegaeageg aegtggggga geg gtgaeggage tggggeggee tgatgaggag taetggaaea geeagaagga	120 180
tttettgg cetggae gtteegg cateetgg	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt	120 180 240
tttettgg cetggae gtteegg cateetgg	ag tactetaegt etgagtgtea tttetteaat gggaeggage gggtgeggtt aga taettetata accaagagga gtaegtgege ttegaeageg aegtggggga geg gtgaeggage tggggeggee tgatgaggag taetggaaea geeagaagga	120 180
tttettgg cetggae gtteegg cateetgg	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt	120 180 240
tttettgg cetggae gtteegg cateetgg	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt cttc acagtgcagc ggcgag	120 180 240
tttettgg cetggae gtteegg cateetgg	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt	120 180 240
tttettgg ectggae gtteegg eateetgg ggagag	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt cttc acagtgcagc ggcgag	120 180 240
tttettgg cctggac gttccgg catcetg; ggagag	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt cttc acagtgcagc ggcgag	120 180 240
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212>	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt ettc acagtgcagc ggcgag  157 266 DNA	120 180 240
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211>	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt cttc acagtgcagc ggcgag  157 266	120 180 240
tttcttgg cctggac gttccgg catcctg ggagag <210> <211> <212> <213>	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt ettc acagtgcagc ggcgag  157 266 DNA Homo sapiens	120 180 240
tttcttgg cctggac gttccgg catcctg ggagag <210> <211> <212> <213> <400>	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt ettc acagtgcagc ggcgag  157 266 DNA Homo sapiens	120 180 240 266
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212> <213> <400> tttcttgg	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt ettc acagtgcagc ggcgag  157 266 DNA Homo sapiens 157 rag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt	120 180 240 266
tttettgg cctggac gtteegg catectg; ggagag <210> <211> <212> <213> <400> tttettgg cctggac cctggac	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt cttc acagtgcagc ggcgag  157 266 DNA Homo sapiens  157 ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcg ttcgacagcg acgtgggga	120 180 240 266
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212> <213> <400> tttcttgg cctggac gttccgg	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt cttc acagtgcagc ggcgag  157 266 DNA Homo sapiens  157 ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcg ttcgacagcg acgtgggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga	120 180 240 266 60 120 180
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212> <213> <400> tttcttgg cctggac gttccgg catcctg	ag tactctacgt ctgagtgtca tttetteaat gggacggage gggtgeggtt aga tacttetata accaagagga gtacgtgege ttegacageg acgtggggga geg gtgacggage tggggeggee tgatgaggag tactggaaca gecagaagga gaa gacaggegg ccgcggtgga cacetactge agacacaact acggggttgt ette acagtgeage ggegag  157 266 DNA Homo sapiens  157 tag tactctacgt etgagtgtea tttetteaat gggacggage gggtgeggtt aga tacttetata accaagagga gtacgtgege ttegacageg acgtgggga geg gtgacggage tggggeggee tgatgaggag tactggaaca gecagaagga gaa gacaggegg ccgcggtgga cacetactge agacacaact acggggttgg	120 180 240 266 60 120 180 240
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212> <213> <400> tttcttgg cctggac gttccgg catcctg	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt cttc acagtgcagc ggcgag  157 266 DNA Homo sapiens  157 ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcg ttcgacagcg acgtgggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga	120 180 240 266 60 120 180
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212> <213> <400> tttcttgg cctggac gttccgg catcctg	ag tactctacgt ctgagtgtca tttetteaat gggacggage gggtgeggtt aga tacttetata accaagagga gtacgtgege ttegacageg acgtggggga geg gtgacggage tggggeggee tgatgaggag tactggaaca gecagaagga gaa gacaggegg ccgcggtgga cacetactge agacacaact acggggttgt ette acagtgeage ggegag  157 266 DNA Homo sapiens  157 tag tactctacgt etgagtgtea tttetteaat gggacggage gggtgeggtt aga tacttetata accaagagga gtacgtgege ttegacageg acgtgggga geg gtgacggage tggggeggee tgatgaggag tactggaaca gecagaagga gaa gacaggegg ccgcggtgga cacetactge agacacaact acggggttgg	120 180 240 266 60 120 180 240
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212> <213> <400> tttcttgg cctggac gttccgg catcctg	ag tactctacgt ctgagtgtca tttetteaat gggacggage gggtgeggtt aga tacttetata accaagagga gtacgtgege ttegacageg acgtggggga geg gtgacggage tggggeggee tgatgaggag tactggaaca gecagaagga gaa gacaggegg ccgcggtgga cacetactge agacacaact acggggttgt ette acagtgeage ggegag  157 266 DNA Homo sapiens  157 tag tactctacgt etgagtgtea tttetteaat gggacggage gggtgeggtt aga tacttetata accaagagga gtacgtgege ttegacageg acgtgggga geg gtgacggage tggggeggee tgatgaggag tactggaaca gecagaagga gaa gacaggegg ccgcggtgga cacetactge agacacaact acggggttgg	120 180 240 266 60 120 180 240
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212> <213> <400> tttcttgg cctggac gttccgg catcctg	ag tactctacgt ctgagtgtca tttetteaat gggacggage gggtgeggtt aga tacttetata accaagagga gtacgtgege ttegacageg acgtggggga geg gtgacggage tggggeggee tgatgaggag tactggaaca gecagaagga gaa gacaggegg ccgcggtgga cacetactge agacacaact acggggttgt ette acagtgeage ggegag  157 266 DNA Homo sapiens  157 tag tactctacgt etgagtgtea tttetteaat gggacggage gggtgeggtt aga tacttetata accaagagga gtacgtgege ttegacageg acgtgggga geg gtgacggage tggggeggee tgatgaggag tactggaaca gecagaagga gaa gacaggegg ccgcggtgga cacetactge agacacaact acggggttgg	120 180 240 266 60 120 180 240
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212> <213> <400> tttcttgg cctggac gttccgg catcctg tgagag	ag tactctacgt ctgagtgtca tttcttcaat gggacggage gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt cttc acagtgcagc ggcgag  157 266 DNA Homo sapiens  157 rag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtgggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gcg gtgacggagc tggggcggc cacctactgc agacacaact acggggttgg cttc acagtgcagc ggcgag	120 180 240 266 60 120 180 240
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212> <213> <400> tttcttgg cctggac gttccgg catcctg tgagaga	ag tactctacgt ctgagtgtca tttcttcaat gggacggage gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt cttc acagtgcagc ggcgag  157 266 DNA Homo sapiens  157 tag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtgggga gcg gtgacggagc tggggcggc tgatgaggag tactggaaca gccagaagga gca gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgg ttc acagtgcagc ggcgag  158 256	120 180 240 266 60 120 180 240
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212> <213> <400> tttcttgg cctggac gttccgg catcctg tgagaga <210> <211> <212>	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcgg ccgcggtgga cacctactgc agacacaact acggggttgt cttc acagtgcagc ggcgag  157 266 DNA Homo sapiens  157 gag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcc ttcgacagcg acgtgggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gca gtacaggagc cgcggtgga cacctactgc agacacaact acggggttgg cttc acagtgcagc ggcgag  158 256 DNA	120 180 240 266 60 120 180 240
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212> <213> <400> tttcttgg cctggac gttccgg catcctg tgagaga	ag tactctacgt ctgagtgtca tttcttcaat gggacggage gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt cttc acagtgcagc ggcgag  157 266 DNA Homo sapiens  157 tag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtgggga gcg gtgacggagc tggggcggc tgatgaggag tactggaaca gccagaagga gca gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgg ttc acagtgcagc ggcgag  158 256	120 180 240 266 60 120 180 240
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212> <213> tttcttgg cctggac gttccgg catcctg tgagag <210> <211> <212> <213>	ag tactetacgt etgagtgtea tttetteaat gggaeggage gggtgeggtt aga tacttetata accaagaga gtaegtgege ttegacageg aegtgggga geg gtgaeggage tggggeggee tgatgaggag tactggaaca gecagaagga gaa gaeaggeggg eegeggtga eacetactge agaeacaact aeggggttgt ette acagtgeage ggegag  157 266 DNA Homo sapiens  157 rag tactetacgt etgagtgtea tttetteaat gggaeggage gggtgeggtt aga tactetata accaagagga gtaegtgege ttegaeageg aegtgggga geg gtgaeggage tggggegee tgatgaggag tactggaaca geeagaagga geg gtgaeggage tggggegee tgatgaggag tactggaaca geeagagga gaa gaeaggeggg eegeggtga eacetactge agaeacaact aegggttgg ette acagtgeage ggegag  158 256 DNA Homo sapiens	120 180 240 266 60 120 180 240
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212> <213> tttcttgg cctggac gttccgg catcctg tgagag <210> <211> <212> <213>	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtgggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt cttc acagtgcagc ggcgag  157 266 DNA Homo sapiens  157 tag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tactctata accaagagga gtacgtgcgc ttcgacagcg acgtgggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gcg gtgacgagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcgg ccgcggtgga cacctactgc agacacaact acggggttgg cttc acagtgcagc ggcgag  158 256 DNA Homo sapiens 158	120 180 240 266 60 120 180 240 266
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212> <213> <400> tttcttgg cctggac gttccgg catcctg tgagag <210> <211> <212> <10> <212> <213>	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtgggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt cttc acagtgcagc ggcgag  157 266 DNA Homo sapiens  157 tag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tactctata accaagagga gtacgtgcgc ttcgacagcg acgtgggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcgg ccgcggtgga cacctactgc agacacaact acggggttgg cttc acagtgcagc ggcgag  158 256 DNA Homo sapiens  158 tact ctacgtctga gtgtcatttc ttcaatggga cggagcggt gcggttcctg	120 180 240 266 60 120 180 240 266
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212> <213> <400> tttcttgg catcctg tgagag <210> <211> <212> <213>	ag tactctacgt ctgagtgtca tttcttcaat gggacggage gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtgggga gcg gtgacggage tggggcggc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt cttc acagtgcage ggcgag  157 266 DNA Homo sapiens  157 rag tactctacgt ctgagtgtca tttcttcaat gggacggage gggtgcggtt aga tacttctata accaagagga gtacgtgcg ttcgacagcg acgtgggga gcg gtgacggage tggggcggc tgatgaggag tactggaaca gccagaagga gcg gtgacggage tggggcggc tgatgaggag tactggaaca gccagaagga gca gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgg cttc acagtgcage ggcgag  158 256 DNA Homo sapiens  158 ract ctacgtctga gtgtcatttc ttcaatggga cggagcggt gcggttcctg fact ctacgtctga gtgtcatttc ttcaatggga cggagcgggt gcggttcctg fact ctacagtctga gtgtcatttc ttcaatggga cggagcgggt gcggttcctg fact ctcataacca ggaggagaac gtgcgcttcg acagcgacgt gggggagttc	120 180 240 266 60 120 180 240 266 60 120
tttcttgg cctggac gttccgg catcctg; ggagag <210> <211> <212> <213> <400> tttcttgg catcctg tgagag <210> <211> <212> <213>	ag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtgggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgt cttc acagtgcagc ggcgag  157 266 DNA Homo sapiens  157 tag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tactctata accaagagga gtacgtgcgc ttcgacagcg acgtgggga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga gaa gacaggcgg ccgcggtgga cacctactgc agacacaact acggggttgg cttc acagtgcagc ggcgag  158 256 DNA Homo sapiens  158 tact ctacgtctga gtgtcatttc ttcaatggga cggagcggt gcggttcctg	120 180 240 266 60 120 180 240 266 60 120

<210> 159 <211> 241 <212> DNA <213> Homo sapiens	
	0 180 40 241
<210> 160 <211> 250 <212> DNA <213> Homo sapiens	
<210> 161 <211> 247 <212> DNA <213> Homo sapiens	
<400> 161 ccacgtttet tggagtacte tacgtetgag tgteatttet teaatgggac ggagegggtg cggtteetgg acagatactt etataaceaa gaggagtacg tgcgettega cagegaegtg ggggagttee gggeggtgac ggagetggg eggeetgatg aggagtactg gaacagecag aaggaettee tggaagacag gegggeeetg gtggacacet actgeagaca caactacggg gttggtg	80
<210> 162 <211> 251 <212> DNA <213> Homo sapiens	
ttcctggaag acaggcgggc cgcggtggac acctactgca gacacaacta cggggttggt 240	80
<210> 163 <211> 270 <212> DNA <213> Homo sapiens <400> 163	

cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga eagataette tataaceaag aggagtaegt gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetgggge ggeetgatga ggagtaetgg aacageeaga aggaetteet ggaagaeagg egggeeetgg tggaeaceta etgeagaeae aactaegggg ttgtggagag etteacagtg eageggegag	60 120 180 240 270
<210> 164 <211> 240 <212> DNA <213> Homo sapiens	
<400> 164 ttggagtact ctacgtctga gtgtcatttc ttcaatggga cggagcgggt geggttcctg gacagatact tctataacca agaggagtac gtgcgcttcg acagcgacgt gggggagttc cgggcggtga cggagctggg gcggcctgat gaggagtact ggaacagcca gaaggacctc ctggagcaga ggcgggccgc ggtggacacc tactgcagac acaactacgg ggttggtgag	60 120 180 240
<210> 165 <211> 246 <212> DNA <213> Homo sapiens	
<400> 165 tttettggag tactetacgt etgagtgtea tttetteaat gggacggage gggtgeggtt cctggacaga tacttetata accaagagga gtacgtgege ttegacageg acgtggggga gtteegggeg gtgacggage tggggeggee tgatgaggag tactggaaca gecagaagga etteetggaa gacaggeggg eegeggtgga caattactge agacacaact acggggttgg tgagag	60 120 180 240 246
<210> 166 <211> 270 <212> DNA <213> Homo sapiens	
<400> 166 cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gagegggtge ggtteetgga cagataette tataaceaag aggagtaegt gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetggge ggeetgatga ggagtaetgg aacageeaga aggaetteet ggaagaeagg egggeegeg tggacaaeta etgeagaeae aactaegggg ttggtgagag etteacagtg eageggegag	60 120 180 240 270
<210> 167 <211> 270 <212> DNA <213> Homo sapiens	
<400> 167 cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc tataaccaag aggagaacgt gcgcttcgac agcgacgtgg gggagttccg ggcggtgacg gagctgggc ggcctgatga ggagtactgg aacagccaga aggacttcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttggtgagag cttcacagtg cagcggcgag	60 120 180 240 270
<210> 168 <211> 270 <212> DNA <213> Homo sapiens	
<400> 168	

<212> DNA <213> Homo sapiens

cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga eagataette tataaceaag aggagteegt gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetgggge ggeetgatga ggagtaetgg aacageeaga aggaetteet ggaagaeagg egggeegegg tggaeaceta etgeagaeae aactaegggg ttggtgagag etteacagtg eageggegag	60 120 180 240 270
<210> 169 <211> 269 <212> DNA <213> Homo sapiens	
<400> 169 cacgtttctt ggagctgctt aagtetgagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga aggacttcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttggtgagag cttcacagtg cagcggcga	60 120 180 240 269
<210> 170 <211> 283 <212> DNA <213> Homo sapiens	
<400> 170ggggacacca gaccacgttt ettggagtac tetacgtetg agtgtcattt ett acggagcggg tgcggtteet ggacagatac ttetataacc aagaggagta egtgegette gacagcgacg tgggggagtt ecgggeggtg acggagetgg ggeggeetga tgaggageac tggaacagcc agaaggacat eetggaagac aggegggeeg eggtggacac etactgeaga cacaactacg gggttggtga gagetteaca gtgcagegge gag	120 180 240 283
<210> 171 <211> 270 <212> DNA <213> Homo sapiens	
<400> 171 cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga eagataette tataaceaag aggagtaegt gegettegae agegaegtgg ggagtteeg ggeggtgaeg gagetgggge ggeetgatga ggagtaetgg aacageeaga aggaetteet ggaagaeagg egggeegtgg tggaeaceta etgeagaeae aactaegggg ttggtgagag etteaeagtg eageggegag	60 120 180 240 270
<210> 172 <211> 259 <212> DNA <213> Homo sapiens	
<400> 172 ttggagtact ctacgtctga gtgtcatttc ttcaatggga cggagcgggt gcggttcctg gacagatact tctataacca agaggagtac gtgcgcttcg acagcgacgt gggggagttc cgggcggtga cggagctggg gcggcctgat gaggactact ggaacagcca gaaggacttc ctggaagaca ggcgggccgc ggtggacacc tactgcagac acaactacgg ggttggtgag agcttcacag tgcagcggc	60 120 180 240 259
<210> 173 <211> 269 <212> DNA	

44005 1770	
<400> 173 cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gagegggtge ggtteetga eagataette tataaceaag aggagtaegt gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetggge ggeetgatga ggagtaetgg aacageeag aggaeeteet ggageagag egggeegegg tggacaeeta etgeagaeae aactaeggggttgtggagag etteacagtg eageggega	
<210> 174 <211> 259 <212> DNA <213> Homo sapiens	
<400> 174 ttggagtact ctacgtctga gtgtcatttc ttcaatggga cggagcggt gcggttcctg gacagatact tctataacca agaggagtac gtgcgcttcg acagcgacgt gggggagttc cgggcggtga cggagctggg gcggcctgat gaggactact ggaacagcca gaaggacttc ctggaagaca ggcgggccgc ggtggacacc tactgcagac acaactacgg ggttgtggag agcttcacag tgcagcggc	
<210> 175 <211> 267 <212> DNA <213> Homo sapiens	
<400> 175 cgtttcttgg agtactctac gtctgagtgt catttcttca atgggacgga gcgggtgcgg ttcctggaca gatacttcta taaccaagag gagtacgtge gcttcgacag cgacgtgggg gagttccggg cggtgacgga gctggggcgg cctgatgagg agtactggaa cagccagaa gacctcctgg aagacgagcg ggccgcggtg gacacctact gcagacacaa ctacggggtt gtggagagct tcacagtgca gcggcga	
<210> 176 <211> 270 <212> DNA <213> Homo sapiens	
<400> 176 cacgtttett ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge ggtteetgga eagatactte tataaceaag aggagtacgt gegettegae agegaegtgg ggagtaceg ggeggtgaeg gagetgggge ggeetgatga ggagtaetgg aacageeag aggaetteet ggaagaeagg egggeegegg tggaeaceta etgeagaeae aactaegggg ttggtgagag etteacagtg eageggegag	
<210> 177 <211> 270 <212> DNA <213> Homo sapiens	
<400> 177 cacetttett ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge ggtteetgga cagatactte tataaccaag aggagtacgt gegettegae agegagtgeg gggagtteeg ggeggtgaeg gagetgggge ggeetgatga ggggtaetgg aacagecag aggaetteet ggaagacagg egggeegegg tggacaceta etgeagacae aactaegggg ttgtggagag etteacagtg eageggegag	

•	
<211> 270	
<211> 210 <212> DNA	
<b></b>	
<213> Homo sapiens	
<400> 178	
cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gagegggtge	60
ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg	120
gggagttccg ggcggtgagg gagctggggc ggcctgatga ggagtactgg aacagccaga	180
aggacttect ggaagacagg egggeegegg tggacaceta etgeagacae aactaegggg	240
ttggtgagag cttcacagtg cagcggcgag	270
tiggigagag circacagig cagoggogag	210
<210> 179	
<211> 246	
<212> DNA	
<213> Homo sapiens	
<400> 179	
cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc	60
ggttcctgga cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg	120
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga	180
••• • • • • • • • • • • • • • • • • •	240
aggactteet ggaagaegag egggeegegg tggacaceta etgeagaeae aactaegggg	
ttgtgg	246
010 100	
<210> 180	
<211> 266	
<212> DNA	
<213> Homo sapiens	
<400> 180	
tttcttggag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt	60
cctggacaga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga	120
	180
gtaccgggcg gtgacggagc tggggcgcc tgatgaggag tactggaaca gccagaagga	240
cttcctggaa gacgagcggg ccgcggtgga cacctactgc agacacaact acggggttgt	
ggagagette acagtgeage ggegag	266
010. 101	
<210> 181	
<211> 270	
<212> DNA	
<213> Homo sapiens	
<400> 181	
cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gagegggtge	60
	00
getteetega cagatactic tataaccaag aggagtacgt gegettegae agegaegteg	
ggttcctgga cagatactic tataaccaag aggagtacgt gcgcttcgac agcgacgtgg	120
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga	120 180
gggagtteeg ggeggtgaeg gagetgggge ggeetgatga ggagtaetgg aacageeaga aggaeeteet ggaagaeagg egggeeggeg tggaeaceta etgeagaeae aactaegggg	120 180 240
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga	120 180
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga aggacctcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag	120 180 240
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga aggacctcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag  <210> 182	120 180 240
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga aggactcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag  <210> 182 <211> 270	120 180 240
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga aggactcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag  <210> 182 <211> 270 <212> DNA	120 180 240
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga aggactcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag  <210> 182 <211> 270	120 180 240
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga aggactcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag  <210> 182 <211> 270 <212> DNA	120 180 240
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga aggactcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag  <210> 182 <211> 270 <212> DNA <213> Homo sapiens	120 180 240
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga aggactcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag  <210> 182 <211> 270 <212> DNA <213> Homo sapiens  <400> 182	120 180 240
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga aggacctcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag  <210> 182 <211> 270 <212> DNA <213> Homo sapiens  <400> 182 cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcggtgc	120 180 240 270
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga aggactcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggaaga cttcacagtg cagcggcgag  <210> 182 <211> 270 <212> DNA <213> Homo sapiens  <400> 182 cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcggtgc ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg	120 180 240 270
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga aggactcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag  <210> 182 <211> 270 <212> DNA <213> Homo sapiens  <400> 182 cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcggtgc ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg gggagttccg ggcggtgagg gagctgggg gagctggtga gagctgggg gagctggag gagctgggg gagctgaga gagcagaga	120 180 240 270 60 120 180
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga aggactcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggaaga cttcacagtg cagcggcgag  <210> 182 <211> 270 <212> DNA <213> Homo sapiens  <400> 182 cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg ggagttcct ggaggagttcc ggcggtgagg gagctgggg ggcctgatga ggagtactgg aacagccaga aggacttcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg	120 180 240 270 60 120 180 240
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga aggactcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag  <210> 182 <211> 270 <212> DNA <213> Homo sapiens  <400> 182 cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcggtgc ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg gggagttccg ggcggtgagg gagctgggg gagctggtga gagctgggg gagctggag gagctgggg gagctgaga gagcagaga	120 180 240 270 60 120 180

<400> 187

```
<210>
        183
<211>
        370
<212>
       DNA
<213> Homo sapiens
<400>
atggtgtgtc tgaggctccc tggaggctcc tgcatggcag ttctgacagt gacactgatg
                                                                   60
                                                                 120
gtgetgaget ecceaetgge tttggetggg gacaccagae eacgtttett ggagtaetet
                                                                   180
acgggtgagt gttatttett caatgggacg gagegggtge ggttaetgga gagacaette
                                                                    240
cataaccagg aggageteet gegettegae agegaegtgg gggagtteeg ggeggtgaeg
                                                                    300
gagetgggge ggeetgtege egagteetgg aacagecaga aggacateet ggaagacagg
                                                                   360
cgcgccgcgg tggacaccta ttgcagacac aactacgggg ctgtggagag cttcacagtg
                                                                       370
cagcggcgag
<210>
        184
        370<212> DNA
<211>
<213> Homo sapiens
<400>
        184
                                                                   60
atggtgtgtc tgaggctccc tggaggctcc tgcatggcag ttctgacagt gacactgatg
gtgetgaget ecceaetgge tttggetggg gacaccagae eaegtttett ggagtaetet
                                                                 120
acgggtgagt gttatttett caatgggacg gagegggtge ggttactgga gagacaette
                                                                   180
                                                                    240
cataaccagg aggageteet gegettegae agegaegtgg gggagtteeg ggeggtgaeg
                                                                    300
gagetgggge ggeetgtege egagteetgg aacagecaga aggacateet ggaagacagg
                                                                    360
cgggccgcgg tggacaccta ctgcagacac aactacgggg ctgtggagag cttcacagtg
                                                                      370
cagcggcgag
<210>
        185
<211>
       270
<212> DNA
<213> Homo sapiens
<400> 185
                                                                   60
cacgtttctt ggagtactct acgggtgagt gttatttctt caatgggacg gagcgggtgc
                                                                   120
ggttactgga gagacacttc cataaccagg aggageteet gegettegae agegaegtgg
                                                                    180
gggagttccg ggcggtgacg gagctggggc ggcctgtcgc cgagtcctgg aacagccaga
                                                                    240
aggaetteet ggaagaeagg egegeegeg tggacaceta ttgeagaeae aactaegggg
                                                                     270
ctgtggagag cttcacagtg cagcggcgag
<210>
        186
<211>
        243
<212>
        DNA
<213>
        Homo sapiens
<400>
        186
                                                                   60
ttcttggagt actctacggg tgagtgttat ttcttcaatg ggacggagcg ggtgcggtta
                                                                    120
ctggagagac acttccataa ccaggaggag ctcctgcgct tcgacagcga cgtgggggag
                                                                    180
ttccgggcgg tgacggagtt ggggcggctt gtcgccgagt cctggaacag ccagaaggac
                                                                   240
ttcctggaag acaggegege egeggtggae acetactgea gacacaacta eggggetgtg
                                                                       243
gag
<210>
        187
        266
<211>
<212>
        DNA
<213>
        Homo sapiens
```

cacgtttctt ggagtactct acgggtgagt gttatttctt caatgggacg gagcgggtgc

ggttactgga gagacacttc cataaccagg aggagctcct gcgcttcgac agcgacgtgg gggagttccg ggcggtgacg gagctggggc ggcctgtcgc cgagtcctgg aacagccaga aggacatcct ggaagacagg cgcgccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcgg	120 180 240 266
<210> 188 <211> 235 <212> DNA <213> Homo sapiens	
<400> 188 gagtacteta egggtgagtg ttatttette aatgggaegg agegggtgeg gttactggag agacacttee ataaccagga ggageteetg egettegaea gegaegtggg ggagtteegg geggtgaegg agetggggeg geetgatgag gagtaetgga acageeagaa ggaeateetg gaagaeagge gegeegeggt ggaeacetat tgeagaeaea actaegggge tgtgg	60 120 180 235
<210> 189 <211> 270 <212> DNA <213> Homo sapiens	
<400> 189 cacgtttett ggagtaetet acgggtgagt gttatttett caatgggaeg gagegggtge ggttaetgga gagacaette cataaccagg aggagtteet gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetgggge ggeetgtege egagteetgg aacagecaga aggacateet ggaagacagg egegeegegg tggacaecta ttgcagacae aactaegggg etgtggagag etteacagtg eageggegag	60 120 180 240 270
<210> 190 <211> 283 <212> DNA <213> Homo sapiens	
<400> 190ggggacacca gaccacgttt cttggagtac tctacgggtg agtgttattt cttacgggtg tgcggttact ggagagacac ttccataacc aggaggagct cctgcgcttc gacagcgacg tgggggagtt ccgggggtg acggagctgg ggcggcctgt cgccgagtcc tggaacagcc agaaggacat cctggaagac aggcgccgc cggtggacac ctattgcaga cacaactacg gggctgtgga gagcttcaca gtgcagcggc gag	tcaatggg 60 120 180 240 283
<210> 191 <211> 270 <212> DNA <213> Homo sapiens	
<400> 191 cacgtttett ggagtaetet acgggtgagt gttatttett caatgggaeg gagegggtge ggttaetgga gagacaette cataaccagg aggageteet gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetggge ggeetgtege egagteetgg aacagecaga aggacateet gggagaeagg egegeegegg tggacaeeta ttgeagaeae aactaegggg etgtggagag etteacagtg eageggegag	60 120 180 240 270
<210> 192 <211> 270 <212> DNA <213> Homo sapiens	
<400> 192 cacgtttett ggagtactet acgggtgagt gttatttett caatgggacg gagegggtge	60

·	•
ggtteetgga gagacaette cataaceagg aggageteet gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetgggge ggeetgtege egagteetgg aacageeagg aggacateet ggaagacagg egegeegegg tggacaeeta ttgcagacae aactaeggg etgtggagag etteacagtg eageggegag	
<210> 193	
<211> 283	
<212> DNA <213> Homo sapiens	
<213> Homo sapiens	
<400> 193	
ggggacacca gaccacgttt ettggagtac tetacgtetg agtgteattt etteaatggg acggageggg tgeggtteet ggacagatac ttecataacc aggaggagaa egtgegette gacagegacg tgggggagtt eegggeggtg acggagetgg ggeggeetga tgeegagta tggaacagec agaaggacat eetggaagac gagegggeeg eggtggacac etactgeag cacaactacg gggttgtgga gagetteaca gtgeagegge gag	c 180
<210> 194	
<211> 270	
<212> DNA	
<213> Homo sapiens	
<400> 194	
cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga eagataette cataaceagg aggagaaegt gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetggge ggeetgatge egagtaetgg aacageeag aggaeateet ggaagaegag egggetgegg tggaeaeeta etgeagaeae aactaeggg ttgtggagag etteaeagtg eageggegag	a 180
<210> 195	
<211> 270	
<212> DNA	
<213> Homo sapiens	
<400> 195	
cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga eagataette cataaccagg aggagaacgt gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetggge ggeetgatge egagtaetgg aacageeag aggaeateet ggaagaegag egggeegegg tggaeaceta ttgeagaeae aactaeggg ttgtggagag etteacagtg eageggegag	
<210> 196	
<211> 283	
<212> DNA	
<213> Homo sapiens	
<400> 196	
ggggacacca gaccacgttt cttggagtac tctacgtctg agtgtcattt cttcaatggg acggagcggg tgcggttcct ggacagatac ttccataacc aggaggagaa cgtgcgcttc gacagcgacg tgggggagtt ccgggcggtg acggagctgg ggcggcctga tgccgagta tggaacagcc agaaggacat cctggaagac gagcgggccg cggtggacac ctactgcag cacaactacg gggttggtga gagcttcaca gtgcagcggc gag	
<210> 197	
<210> 197 <211> 266	
DATA	

<211> 200
<212> DNA
<213> Homo sapiens

<400> 197 cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge ggtteetga eagataette eataaceagg aggagaaegt gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetggge ggeetgatge egagtaetgg aacageeaga aggaeateet ggaagaegag egegeegegg tggaeaceta etgeagaea aactaegggg ttggtgagag etteacagtg eagegg	60 120 180 240 266
<210> 198 <211> 283 <212> DNA <213> Homo sapiens	
<400> 198 ggggacacca gaccacgttt cttggagtac tctacgtctg agtgtcattt cttcaatggg acggagcggg tgcggttcct ggacagatac ttctataacc aagaggagta cgtgcgcttc gacagcgacg tgggggagta ccgggcggtg acggagctgg ggcggcctag cgccgagtac tggaacagcc agaaggacat cctggaagac aagcgggccg cggtggacac ctactgcaga cacaactacg gggttggtga gagcttcacg gtgcagcggc gag	60 120 180 240 283
<210> 199 <211> 262 <212> DNA <213> Homo sapiens	
<400> 199 ttggagtact ctacgtctga gtgtcatttc ttcaatggga cggagcgggt gcggttcctg gacagatact tctataacca agaggagtac gtgcgcttcg acagcacgt gggggagtac cgggcggtga cggagctggg gcggcctagc gccgagtact ggaacagcca gaaggacatc ctggaagaca agcgggccgc ggtggacacc tactgcagac acaactacgg ggttggtgag agcttcacag tgcagcggcg ag	60 120 180 240 262
<210> 200 <211> 283 <212> DNA <213> Homo sapiens	
<400> 200ggggacacca gaccacgttt cttggagtac tctacgtctg agtgtcattt ctt acggagcggg tgcggttcct ggacagatac ttctataacc aagaggagta cgtgcgcttc gacagcgacg tgggggagtt ccgggcggtg acggagctgg ggcggcctag cgccgagtac tggaacagcc agaaggacat cctggaagac gagcgggccg cggtggacac ctactgcaga cacaactacg gggttgtgga gagcttcaca gtgcagcggc gag	caatggg 60 120 180 240 283
<210> 201 <211> 268 <212> DNA <213> Homo sapiens	
<400> 201 cgtttcttgg agtactctac gtctgagtgt catttcttca atgggacgga gcgggtgcgg ttcctggaca gatacttcca taaccaggag gagaacgtgc gcttcgacag cgacgtgggg gagttccggg cggtgacgga gctggggcgg cctgatgccg agtactggaa cagccagaag gacttcctgg aagacaggcg ggccgcggtg gacacctact gcagacacaa ctacggggtt ggtgagagct tcacagtgca gcggcgag	60 120 180 240 268

<211> 228 <212> DNA <213> Homo sapiens <400> 202 tgtcatttct tcaatgggac ggagcggtg cggttcctgg acagatactt ccataaccag gaggagaacg tgcgcttcga cagcgacgtg ggggagttcc gggcggtgac ggagctggg cggctgatg ccgagtactg gaacagccag aaggacatcc tggaagacag gcggccgcg gtggacacct actgcagaca caactacggg gttgtggaga gcttcaca	60 120 180 228
<210> 203 <211> 270 <212> DNA <213> Homo sapiens	
<400> 203 cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga eagataette tataaceaag aggagtaegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacageeaga aggaetteet ggaagaeagg egggeegegg tggaeaceta etgeagaeae aactaegggg ttggtgagag etteaeagtg eageggegag	60 120 180 240 270
<210> 204 <211> 268 <212> DNA <213> Homo sapiens	
<400> 204 cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga eagataette tataaceaag aggagtaegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetggge ggeetgaege tgagtaetgg aacageeaga aggaetteet ggaagaeagg egggeegegg tggaeaceta etgeagaeae aactaegggg ttggtgagag etteaeagtg eageggeg	60 120 180 240 268
<210> 205 <211> 255 <212> DNA <213> Homo sapiens	
<400> 205 ttettgagt actetacgte tgagtgteat ttetteaatg ggaeggageg ggtgeggtte etggaeagat actteeataa eeaggaggag ttegtgeget tegaeagega egtggggag taeegggegg tgaeggaget ggggeggeet gatgeegagt actggaaeag eeagaaggae ateetggaag aegagegge egeggtggae acetaetgea gaeacaacta eggggttgtg gagagettea eagtg	60 120 180 240 255
<210> 206 <211> 256 <212> DNA <213> Homo sapiens	
<400> 206 tttcttggag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt cctggacaga tacttccata accaggagga gaacgtgcgc ttcgacagcg acgtgggga gttccgggcg gtgacggagc tggggcggcc tgatgccgag tactggaaca gccagaagga catcctggag caggcgcggg ccgcggtgga cacctactgc agacacaact acggggttgt ggagagcttc acagtg	60 120 180 240 256

<210>	207		
<211>	270		
<212>	DNA	•	
<213>	Homo sapiens		
	•		
<400>			
	tt ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge	60	
	ga cagatactic cataaccagg aggagaacgt gcgcttcgac agcgacgtgg	120 180	
	ccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga	240	
	cet ggaagacaag egggeegegg tggacaceta etgeagacae aaètaegggg gag etteacagtg eageggegag	240 270	
ugugga	sas cricacasis cascsscsas	210	
<210>	208		
<211>	270		
<212>	DNA		
<213>	Homo sapiens		
<400>	208	00	
	tt ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge	60	
	ga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg	120	
	ccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga	$\frac{180}{240}$	
	cet ggaagacagg egggeegegg tggacaceta etgeagacae aactaegggg	$\begin{array}{c} 240 \\ 270 \end{array}$	
iigigga	gag etteacagtg cageggegag	270	
<210>	209		
<211>	270		
<212>	DNA		
<213>	Homo sapiens		
<400>	209		
	tt ggagtactct acgtetgagt gteatttett eaatgggaeg gagegggtge	60	
	ga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg	120	
	ccg ggcggtgacg gagctggggc ggcctagcgc cgagtactgg aacagccaga	180	
	cet ggaagacagg egggeegegg tggacaceta etgcagacae aactaegggg	$\begin{array}{c} 240 \\ 270 \end{array}$	
iiggiga	gag etteacagtg cageggegag	210	
<210>	210		
<211>	262		
<212>	DNA		
<213>	Homo sapiens		
<400>		000 0	60
	gga cagatactic tataaccaag aggagtacgt gcgcttcgac agcgacgtgg	120	
	ccg ggcggtgacg gagctggggc ggcctagcgc cgagtactgg aacagccaga	$\begin{array}{c} 180 \\ 240 \end{array}$	
	cet ggaagacagg egggeeetgg tggacaceta etgcagacae aactaegggg	$\begin{array}{c} 240 \\ 262 \end{array}$	
ııggıga	gag cttcacagtg ca	202	
<210>	211		
<211>	227		
<212>	DNA		
<213>	Homo sapiens		
<400>	211	CO	
	gag tgtcatttct tcaatgggac ggagcgggtg cggttcctgg acagatactt	60 120	
	caa gaggagtacg tgcgcttcga cagcgacgtg ggggagttcc gggcggtgac	180	
	ggg cggcctgatg ccgagtactg gaacagccag aaggacttcc tggaagacag	227	
RcRRRcc	gcg gtggacacct actgcagaca caactacggg gttggtg	<i>44</i> 1	

<210> 212	
<211> 270	
<212> DNA	
<213> Homo sapiens	
<400> 212	
cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gagegggtge	60
ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg	120
gggagttccg ggcggtgacg gagctggggc ggcctgacgc tgagtactgg aacagccaga	180
aggactteet ggaagacagg egggeegegg tggacaceta etgeagacae aactaegggg	240
ttggtgagag cttcacagtg cageggegag	270
<210> 213	
<211> 266	
<212> DNA	
<213> Homo sapiens	
<400> 213	
tttcttggag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt	60
cctggagaga tacttccata accaggagga gaacgtgcgc ttcgacagcg acgtggggga	120
gttccgggcg gtgacggagc tggggcggcc tgatgccgag tactggaaca gccagaagga	180
catcctggaa gacgagcggg ccgcggtgga cacctactgc agacacaact acggggttgt	240
ggagagette acagtgeage ggegag	266
<210> 214	
<211> 247	
<212> DNA	
<213> Homo sapiens	
<400> 214	
ggagtactet acgtetgagt gtcatttett caatgggacg gagcgggtge ggtteetgga	60
cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg gggagttccg	120
ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga aggacatect	180
ggaagacgag cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgatgagag	$\begin{array}{c} 240 \\ 247 \end{array}$
cttcaca	241
<210> 215	
<211> 283	
<212> DNA	
<213> Homo sapiens	
<400> 215	
ggggacacca gaccacgttt cttggagtac tctacgggtg agtgttattt cttcaatggg	60
acggagcggg tgcggttcct ggacagatac ttctataacc aagaggagta cgtgcgcttc	120
gacagcgacg tgggggagtt ccgggcggtg acggagctgg ggcggcctga tgccgagtac	180
tggaacagcc agaaggacat cctggaagac gagcgggccg cggtggacac ctactgcaga	$\begin{array}{c} 240 \\ 283 \end{array}$
cacaactacg gggttgtgga gagcttcaca gtgcagcggc gag	200
·	
<210> 216	
<211> 270	
<212> DNA	
<213> Homo sapiens	
<400> 216	
cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc	60
ggttcctgga cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg	120
gggagttccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga	180
· · · · · · · · · · · · · · · · · · ·	

	•		
	cct ggaagacagg cgggccctgg tggacaccta ctgcagacac aactacgggg	240	
ttgtgga	gag cttcacagtg cageggegag	270	
<210>	217		
<211>	283		
<212>	DNA		
<213>	Homo sapiens		
-4005	017		
<400>	217 acca gaccacgttt cttggagtac tctacgtctg agtgtcattt cttcaatggg	60	
	eggg tgeggtteet ggagagatae tteeataace aggaggagtt egtgegette	120	
	gacg tgggggggta ccgggcggtg acggagctgg ggcggcctga tgccgagtac	180	
	agce agaaggacat cetggaagae gagegggeeg eggtggacae etaetgeaga	240	
	acg gggttgtgga gagettcaca gtgcagegge gag	283	
<210>	218		
<211>	266		
<211>	DNA		
<213>	Homo sapiens		
	•		•
<400>	218	00	
	ett ggagtactet acgtetgagt gteatttett eaatgggaeg gagegggtge	$\frac{60}{120}$	
	gga cagatactte cataaccagg aggagaacgt gegettegae agegaegtgg eeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacagecaga	180	
	acct ggaagacgag cgggccgcgg tggacaccta ctgcagacac aactacgggg	$\frac{130}{240}$	
	gag cttcacagtg cagcgg	266	
******	PuB 22220000 PuB 2000		
<210>	219		
<211>	283		
<212><213>	DNA Hama ganiana		
<b>\</b> 213/	Homo sapiens		
<400>	219		
	acca gaccacgttt cttggagtac tctacgtctg agtgtcattt cttcaatggg	60	
	eggg tgeggtteet ggacagatae ttetataace aagaggagta egtgegette	120	
	gacg tgggggggtt ccgggcggtg acggactgg ggcggcctag cgccgagtac	$\begin{array}{c} 180 \\ 240 \end{array}$	
	agec agaaggaett eetggaagae aggegggeeg eggtggaeae etaetgeaga aeg gggttggtga gagetteaea gtgeagegge gag	240 283	
Cacaaci	acg gggriggiga gagcircaca grgcagoggo gag	200	
<210>	220		
<211>	273		
<212>	DNA Usana paniana		
<213>	Homo sapiens		
<400>	220gaccacgttt ettggagtac tetacgtetg agtgteattt etteaatggg acg	gagcggg	60
tgcggtt	cct ggacagatac ttctataacc aagaggagta cgtgcgcttc gacagcgacg	120	
	agtt cegggeggtg aeggagetgg ggeggeetga tgeegagtae tggaacagee	180	
	acat cetggaagac gagegggeeg eggtggacae etactgeaga cacaactaeg	240	
gggttgt	gga gagetteaca gtgeagegge gag	<b>27</b> 3	
<210>	221		
<211>	265		
<212>	DNA		
<213>	Homo sapiens		
<400>	221		

cgtttcttgg agtactctac gtctgagtgt catttcttca atgggacgga gcgggtgcgg ttcctggaca gatacttcta taaccaagag gagtacgtgc gcttcgacag cgacgtgggg gagttccggg cggtgacgga gctggggcgg cctgatgccg agtactggaa cagccagaag gacatcctgg aagacgagcg ggccgcggtg gacacctact gcagacacaa ctacggggtt ggtgagagct tcacggtgca gcggc	60 120 180 240 265
<210> 222 <211> 265 <212> DNA <213> Homo sapiens	
<400> 222 cgtttcttgg agtactctac gtctgagtgt catttcttca atgggacgga gcgggtgcgg ttcctggaca gatacttcta taaccaagag gagtacgtgc gcttcgacag cgacgtgggg gagttccggg cggtgacgga gctggggcgg cctgatgccg agtactggaa cagccagaag gacttcctgg aagacgagcg ggccgcggtg gacacctact gcagacacaa ctacggggtt gtggagagct tcacagtgca gcggc	60 120 180 240 265
<210> 223 <211> 249 <212> DNA <213> Homo sapiens	
<400> 223 cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg gggagttccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga aggacctcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttggtgaga	60 120 180 240 249
<210> 224 <211> 270 <212> DNA <213> Homo sapiens	
<400> 224 cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gagegggtge ggtteetgga gagataette cataaceagg aggagaacgt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetgaege tgagtaetgg aacageeaga aggaetteet ggaagaeagg egegeegegg tggaeaceta etgeagaeae aactaegggg ttggtgagag etteaeagtg eageggegag	60 120 180 240 270
<210> 225 <211> 270 <212> DNA <213> Homo sapiens	
<400> 225 cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc ggtacctgga cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg gggagttccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga aggacatcct ggaagacgag cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag	60 120 180 240 270
<210> 226	

<211> 248 <212> DNA

270

	0107 102	
<213>	Homo sapiens	
gacagat cgggcgg	226 act ctacgtetga gtgtcattte tteaatggga eggagegggt geggtteetg act teeataacea ggaggagaac gtgegetteg acagegacgt gggggagtte act acgagetggg geggeetgat geeggatact ggaacageea gaaggacate acg agegggeege ggtggacace tactgeagae acaactaceg ggttgtggag	60 120 180 240 248
<210><211><211><211><212><213>	227 270 DNA Homo sapiens	
ggtteetg gggagtt aggaeet	227 Ett ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge gga cagatactte cataaceagg aggagaacgt gegettegae agegaegtgg eeg ggeggtgaeg gagetgggge ggeetgatge egagtactgg aacageeaga eet ggaagaegag egggeegegg tggacaceta etgeagaeae aactaegggg gag etteacagtg eageggegag	60 120 180 240 270
<210><211><211><212><213>	228 253 DNA Homo sapiens	
cctggac gttccgg	228 rag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga gcg gtgacggagc tggggcggcc tagcgccgag tactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgg ettc aca	60 120 180 240 253
<210><211><211><211><212><213>	229 269 DNA Homo sapiens	
ggttcctg gggagtt aggaca	229 ctt ggagtactet acgtetgagt gteatttett eaatgggaeg gagegggtge gga eagatactte eataaceagg aggagaaegt gegettegae agegaegtgg ceg ggeggtgaeg gagetgggge ggeetgtege egagtaetgg aacageeaga teet ggaagaegag egggeegegg tggaeaeeta etgeagaeae aactaegggg gag etteaeagtg eageggega	60 120 180 240 269
<210><211><211><211><212><213>	230 270 DNA Homo sapiens	
gggagta aggaca	230cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gag gga cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg accg ggcggtgacg gagctggggc ggcctagcgc cgagtactgg aacagccaga tcct ggaagacgag cgggccgcgg tggacaccta ctgcagacac aactacgggg	cgggtgc 60 120 180 240 270

ttgtggagag cttcacagtg cagcggcgag

<211>	246	
<212>	DNA	
<213>	Homo sapiens	
	•	
<400>	231	
	ett ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge	60
_	gga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg	120
	accg ggcggtgacg gagctggggc ggcctagcgc cgagtactgg aacagccaga	180
		240
	cet ggaagacaag egggeegegg tggacaacta etgeagacae aactaegggg	246
ttggtg		240
.010	000	
<210>	232	
<211>	270	
<212>	DNA	
<213>	Homo sapiens	
<400>	232	
cacgttto	tt ggagtaetet aegtetgagt gteatttett eaatgggaeg gagegggtge	60
	ga cagatacttc cataaccagg aggagaacct gcgcttcgac agcgacgtgg	120
	ccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga	180
	acct ggaagacgag cgggccgcgg tggacaccta ctgcagacac aactacgggg	240
	gag cttcacagtg cagcggcgag	270
ugguga	gag oncacagig cagoggogag	2.0
<210>	233	
<210> <211>	266	
<212>	DNA	
<213>	Homo sapiens	
<400>	233	
cacgttte	ett ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge	<b>6</b> 0
ggttcctg	gga cagatactte cataaccagg aggagaacgt gegettegae agegaegtgg	120
gggagtt	cct ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga	180
		100
	cet ggaagaegag egggeegegg tggaeaeeta etgeagaeae aactaegggg	$\frac{130}{240}$
	cet ggaagaegag egggeeggg tggacaeeta etgeagaeae aactaegggg gag etteacagtg eagegg	
	gag etteacagtg cagegg  gag etteacagtg cagegg	240
		240
ttgtgga	gag cttcacagtg cagcgg	240
ttgtgga <210>	gag etteacagtg cagegg 234	240
ttgtgga <210> <211>	gag etteacagtg cagegg  234 270	240
<210> <211> <212>	gag etteacagtg eagegg  234 270 DNA	240
ttgtgga <210> <211>	gag etteacagtg cagegg  234 270	240
<210> <211> <212> <213>	234 270 DNA Homo sapiens	240
<210> <211> <212> <213> <400>	234 270 DNA Homo sapiens	240 266
<210> <211> <211> <212> <213> <400> cacgttte	234 270 DNA Homo sapiens 234 ett ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc	240 266
<pre>ttgtgga &lt;210&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt; &lt;400&gt; cacgtttcggttcctg</pre>	234 270 DNA Homo sapiens  234 ett ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge gga cagatactte cataaccagg aggagaacgt gegettegae agegaegtgg	240 266 60 120
<pre>ttgtgga &lt;210&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt; &lt;400&gt; cacgtttcggttcctg</pre>	234 270 DNA Homo sapiens 234 ett ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc	240 266 60 120 180
<pre>ttgtgga &lt;210&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt; &lt;400&gt; cacgtttc ggttccte gggagte</pre>	234 270 DNA Homo sapiens  234 ett ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge gga cagatactte cataaccagg aggagaacgt gegettegae agegaegtgg	240 266 60 120 180 240
<210> <211> <212> <213> <213> <400> cacgtttcggttcctggggagtagggagtagggagtaggagagaga	234 270 DNA Homo sapiens  234 ett ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc gga cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg accg ggcggtgacg gagctgggc ggcctgatgc cgagtactgg aacagccaga tcct ggaagacgag cgggccgcgg tggacaccta ctgcagacac aactacgggg	240 266 60 120 180
<210> <211> <212> <213> <213> <400> cacgtttcggttcctggggagtagggagtagggagtaggagagaga	234 270 DNA Homo sapiens  234 ett ggagtactet acgtetgagt gtcatttett caatgggacg gagcgggtgc gga cagatactte cataaccagg aggagaacgt gcgettegac agcgacgtgg accg ggcggtgacg gagctgggc ggcctgatgc cgagtactgg aacagccaga	240 266 60 120 180 240
<210> <211> <212> <213> <213> <400> cacgtttcggttcctggggagtagggagtagggagtaggagagaga	234 270 DNA Homo sapiens  234 ett ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc gga cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg accg ggcggtgacg gagctgggc ggcctgatgc cgagtactgg aacagccaga tcct ggaagacgag cgggccgcgg tggacaccta ctgcagacac aactacgggg	240 266 60 120 180 240
<210> <211> <212> <213> <400> cacettte ggttccte gggagte aggacat ttggtga	234 270 DNA Homo sapiens  234 ett ggagtactet acgtetgagt gteatttett caatgggaeg gageggtge gga cagatactte cataaccagg aggagaacgt gegettegae aceg ggeggtgaeg gagetggge ggeetgatge ett ggaagaegg gagetggge ggeetgatge ett ggaagaega eggeeggg tggaeaceta etgeagaea aactaegggg gag etteacagtg cageggegag	240 266 60 120 180 240
<pre>&lt;210&gt; &lt;211&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt; &lt;400&gt; cacgtttc ggttcctg gggagta aggaca ttggtga &lt;210&gt; &lt;211&gt;</pre>	234 270 DNA Homo sapiens  234 ett ggagtactet acgtetgagt gtcatttett caatgggacg gagcgggtgc gga cagatactet cataaccagg aggagaacgt gcgettegac agcaggtgg accg ggcggtgacg gagctggggc ggcetgatgc cgagtactgg aacagcaga acct ggaagacgag cgggccgcgg tggacaccta etgcagacac aactacgggg gag ettcacagtg cagcggcgag  235 269	240 266 60 120 180 240
<pre>&lt;210&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt; &lt;400&gt; cacgtttc ggttcctg gggagta aggaca ttggtga &lt;210&gt; &lt;211&gt; &lt;212&gt;</pre>	234 270 DNA Homo sapiens  234 ett ggagtactet acgtetgagt gtcatttett caatgggacg gagcgggtgc gga cagatactte cataaccagg aggagaacgt gcgettegac agcacgtgg accg ggcggtgacg gagctgggc ggcetgatge cgagtactgg aacagccaga teet ggaagacgag cgggccgcgg tggacaccta etgcagacac aactacgggg gag etteacagtg cagcggcgag  235 269 DNA	240 266 60 120 180 240
<pre>&lt;210&gt; &lt;211&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt; &lt;400&gt; cacgtttc ggttcctg gggagta aggaca ttggtga &lt;210&gt; &lt;211&gt;</pre>	234 270 DNA Homo sapiens  234 ett ggagtactet acgtetgagt gtcatttett caatgggacg gagcgggtgc gga cagatactet cataaccagg aggagaacgt gcgettegac agcaggtgg accg ggcggtgacg gagctggggc ggcetgatgc cgagtactgg aacagcaga acct ggaagacgag cgggccgcgg tggacaccta etgcagacac aactacgggg gag ettcacagtg cagcggcgag  235 269	240 266 60 120 180 240
<pre>&lt;210&gt; &lt;211&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt; &lt;400&gt; cacgtttdggttcctgggagtaggacatttggtga &lt;210&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt;</pre>	234 270 DNA Homo sapiens  234 ett ggagtactet acgtetgagt gtcatttett caatgggacg gagegggtge gga cagatactte cataaccagg aggagaacgt gegettegae agegagegtgg aceg ggeggtgacg gagetggge ggeetgatge ett ggaagacgag gagetggge ggeetgatge cagatactg aacagecaga teet ggaagacgag eggeegegg tggacaceta etgeagaca aactacgggg gag etteacagtg cageggegag  235 269 DNA Homo sapiens	240 266 60 120 180 240
<pre>***c210</pre>	234 270 DNA Homo sapiens  234 ett ggagtactet acgtetgagt gtcatttett caatgggacg gagegggtge gga cagatactte cataaccagg aggagaacgt gegettegae agegageggg accg ggeggtgacg gageggtge ggeggtgacg gageggtge ggeetgatge ett ggaagacga gagetggge ggeetgatge cagatactg aacagecaga teet ggaagacgag egggeegegg tggacaceta etgeagaca aactacgggg gag etteacagtg cageggegag  235 269 DNA Homo sapiens  235	240 266 60 120 180 240 270
<pre>&lt;210&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt; &lt;400&gt; cacgtttd ggttcctg gggagtd aggacat ttggtga &lt;210&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt; &lt;400&gt; cacgtttd cacgttd ca</pre>	234 270 DNA Homo sapiens  234 ett ggagtactet acgtetgagt gtcatttett caatgggacg gagegggtge gga cagatactte cataaccagg aggagaacgt gegettegae ageaggtggacg gageggtge ggeggggacg gageggtge ggegggacg gagetggge ggeetgatge cagatactg aacagecaga teet ggaagacgag eggeeggg tggacaceta etgeagacac aactaeggg gag etteacagtg eageggegag  235 269 DNA Homo sapiens  235 ett ggagtactet acgtetgagt gtcatttett caatgggacg gageggtge	240 266 60 120 180 240 270
<pre>&lt;210&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt; &lt;400&gt; cacgtttcggtaggagtaggacatttggtga &lt;210&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt;</pre>	234 270 DNA Homo sapiens  234 ett ggagtactet acgtetgagt gtcatttett caatgggacg gagegggtge gga cagatactte cataaccagg aggagaacgt gegettegae agegaggtggace ggegggtgacg gageggtgace ggageggtgace ggeggtgacg gagetggge ggeetgatge eagatactg aacagecaga teet ggaagacgag eggeeggg tggacaceta etgcagacac aactacgggg gag ettcacagtg cagegggag  235 269 DNA Homo sapiens  235 ett ggagtactet acgtetgagt gtcatttett caatgggacg gageggtge gga cagatactte tataaccaag aggagtacgt gegettegac agegggtge gga cagatactte tataaccaag aggagtacgt gegettegac agegagtgg	240 266 60 120 180 240 270
<pre>&lt;210&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt; &lt;400&gt; cacgtttc ggttccte gggagtc aggaca ttggtga &lt;210&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt; &lt;400&gt; cacgtttt ggttccte gggagtc aggaca ttggtga</pre>	234 270 DNA Homo sapiens  234 ett ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge gga cagatactte cataaccagg aggagaacgt gegettegae ageaggtggg gageggtgaeg gageggtgaeg gagetgggeggtge ggagagaegt gagetgaeg gagetgggegggggggggg	240 266 60 120 180 240 270 60 120 180
<pre>&lt;210&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt; &lt;400&gt; cacgtttcggttcctggggagtcattggtga &lt;210&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt;</pre>	234 270 DNA Homo sapiens  234 ett ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge gga cagatactte cataaccagg aggagaacgt gegettegae aceg ggeggtgaeg gagetggge ggeetgatge etgaagacgag eggeeggggggggggggggggggggggggg	240 266 60 120 180 240 270 60 120 180 240
<pre>&lt;210&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt; &lt;400&gt; cacgtttcggttcctggggagtcattggtga &lt;210&gt; &lt;211&gt; &lt;212&gt; &lt;213&gt;</pre>	234 270 DNA Homo sapiens  234 ett ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge gga cagatactte cataaccagg aggagaacgt gegettegae ageaggtggg gageggtgaeg gageggtgaeg gagetgggeggtge ggagagaegt gagetgaeg gagetgggegggggggggg	240 266 60 120 180 240 270 60 120 180

	•
<210> 236	,
<211> 245	
<212> DNA	
<213> Homo sapiens	
<400> 236	
cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gagegggtge	60
ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg	120 180
gggagtaccg ggcggtgacg gagctggggc ggcctagcgc cgagtactgg aacagccaga aggacatect ggaagacgag cgggccgcgg tggacaceta etgcagacac aactacgggg	240
ttggt	245
<210> 237	
<211> 270	
<212> DNA	
<213> Homo sapiens	
<400> 237	
cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gagegggtge	60
ggttcctgga cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg	120
gggagttccg ggcggtgacg gagctggggc ggcctgatgc cgagtcctgg aacagccaga	180
aggacateet ggaagaegag egggeegegg tggacaeeta etgeagaeae aactaegggg ttggtgagag etteacagtg eageggegag	$\begin{array}{c} 240 \\ 270 \end{array}$
inggigagag circucatagig cagoggogag	210
<210> 238	
<211> 260	
<212> DNA <213> Homo sapiens	
210 Homo sapions	
<400> 238	
ttggagtact ctacgtctga gtgtcatttc ttcaatggga cggagcgggt gcggttcctg	60 120
gacagatact tecataacca ggaggagaac gtgegetteg acagegaegt gggggagtac egggeggtga eggagetggg geggeetgat geegagtact ggaacageca gaaggacate	180
ctggaagacg agcgggccgc ggtggacacc tactgcagac acaactacgg ggttgtggag	240
agetteacag tgeageggeg	260
<210> 239	
<211> 270	
<212> DNA	
<213> Homo sapiens	
<400> 239	
cacgtttett ggagtaetet aegtetgagt gteatttett caatgggaeg gagegggtge	60
ggtacctgga cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg	120
gggagttccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga	180
aggacatect ggaagacgag egggeegegg tggacaceta etgeagacae aactaegggg	$\begin{array}{c} 240 \\ 270 \end{array}$
ttggtgagag cttcacagtg cagcggcgag	210
<210> 240	
<211> 270	
<212> DNA <213> Homo sapiens	
<213> Homo sapiens	
<400> 240cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gag	
ggttcctgga cagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg	120
gggagttccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga aggacttcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg	180 240
ttgtggagag cttcacagtg cageggegag	270
0 00 0 0 0 0 0 0	

WO 2005/063985	618 / 752	PCT/JP2004/019763
<210> 241 <211> 269 <212> DNA <213> Homo sapien	us	
ggttcctgga cagatacttc gggagttccg ggcggtgac	acgtetgagt gteatttett caatgggaeg gagegggtge cataaceagg aggagaacgt gegettegae agegaegtgg g gagetgggge ggeetgetge ggageaetgg aacageeaga g egggeegegg tggaeaceta etgeagaeae aactaegggg g eageggega	60 120 180 240 269
<210> 242 <211> 270 <212> DNA <213> Homo sapien	as	
ggtteetgga cagataette gggagtteeg ggeggtgae	acgtctgagt gtcatttctt caatgggacg gagcgggtgc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg g gagctggggc ggcctgatgc cgagtactgg aacagccaga g cgggccgcgg tggacaccta ctgcagacac aactacgggg g cagcggcgag	60 120 180 240 270
<210> 243 <211> 242 <212> DNA <213> Homo sapien	us	
gacagatact tetataacca cgggcggtga cggagctgg	gtgtcatttc ttcaatggga cggagcggt gcggttcctg a agaggagtac gtgcgcttcg acagcgacgt gggggagttc gg gcggcctgct gcggagcact ggaacagcca gaaggacatc gc ggtggacacc tactgcagac acaactacgg ggttggtgag	60 120 180 240 242
<210> 244 <211> 270 <212> DNA <213> Homo sapier	ıs	
ggtteetgga eagataette gggagtteeg ggeggtgae	acgtetgagt gtcatttett caatgggacg gagegggtge tataaccaag aggagtaegt gegettegae agegaegtgg g gagetgggge ggeetgtege egagtaetgg aacageeaga g egggeegegg tggacaccta etgeagaeae aactaegggg g cageggegag	60 120 180 240 270
<210> 245		

<212> <213>	DNA Homo sapiens
<400>	-10
_	ett ggagtactet acgtetgagt gteatttett caatgggaeg gagegg gga cagataette tataaccaag aggagtaegt gegettegae ageg

<211>

270

cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga eagataette tataaceaag aggagtaegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacageeaga aggaetteet ggaagaeagg egggeeetgg tggaeaeeta etgeagaeae aactaegggg

60

120 180

ttggtgagag cttcacggtg cagcggcgag	270
<210> 246 <211> 270 <212> DNA	
<213> Homo sapiens	
<400> 246 cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg ggagtaccg ggcggtgacg gagctggggc ggcctagcgc cgagtactgg aacagccaga aggacatcct ggaagacgag cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag	60 120 180 240 270
<210> 247 <211> 266 <212> DNA	
<213> Homo sapiens	
<400> 247 cacepttett ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge ggtteetgga eagatactte tataaceaag aggagtacet gegettegae agegagtgg gggagtaceg ggeggtgaeg gagetgggge ggeetagege egagtactgg aacageeaga aggaetteet ggaagaeagg egggeegegg tggacaceta etgeagaea aactaegggg ttggtgagag etteacagtg eagegg	60 120 180 240 266
<210> 248 <211> 270 <212> DNA <213> Homo sapiens	
<400> 248	
cacetttett ggagtaetet acetetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga eagataette tataaceaag aggagaacet gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacageeaga aggaetteet ggaagaeagg egggeegegg tggaeaceta etgeagaeae aactaegggg ttggtgagag etteaeagtg eageggegag	60 120 180 240 270
<210> 249	
<211> 270 <212> DNA	
<213> Homo sapiens	
<400> 249 cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga cagataette cataaceagg aggagaaegt gegettegae agegaegtgg gggagtteeg ggegttgaeg gagetggge ggeetgatge egagtaetgg aacageeaga aggaeateet ggaagaegag egggeegegg tggaeaceta etgeagaeae aactaegggg ttgtggagag etteacagtg eageggegag	60 120 180 240 270
<210> 250 <211> 260 <212> DNA <213> Homo sapiens	
<400> 250 cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc cataaccagg aggagtacgt gcgcttcgac agcgacgtgg ggagttccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga	60 120 180

aggacatect ggaagacgag egggeegegg tggacaceta etgeagacae aactaegggg ttgtggagag etteacagtg	240 260
<210> 251 <211> 269 <212> DNA <213> Homo sapiens	
<400> 251 cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gagegggtge ggtteetgga gagataette cataaceagg aggagaaegt gegettegae agegaegtgg ggagtaeeg ggeggtgaeg gagetggge ggeetgatge egagtaetgg aacageeaga aggaeateet ggaagaegag eggeegegg tggaeaceta etgeagaea aactaegggg ttgtggagag etteaeagtg eageggega	60 120 180 240 269
<210> 252 <211> 270 <212> DNA <213> Homo sapiens	
<400> 252 cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gagegggtge ggtteetgga cagataette tataaceaag aggagtaegt gegettegae agegaegtgg ggagtteeg ggeggtgaeg gagetgggge ggeetgtege egagteetgg aacageeaga aggaetteet ggaagaegag egggeegegg tggaeaceta etgeagaeae aactaegggg ttgtggagag etteacagtg eageggegag	60 120 180 240 270
<210> 253 <211> 266 <212> DNA <213> Homo sapiens	
<400> 253 tttettggag tactetaegt etgagtgtea tttetteaat gggaeggage gggtgeggtt cetggaeaga tacttetata accaagagga gtaegtgege ttegaeage aegtggggga gtaeegggeg gtgaeggage tggggegee tagegeegag taetggaaea geeagaagga etteetggaa gaeaggegge eeetggtgga eacetaetge agaeaeaaet aeggggttgg tgagagette aeggtgeage ggegag	60 120 180 240 266
<210> 254 <211> 370 <212> DNA <213> Homo sapiens	
<400> 254 atggtgtgtc tgaggctcc tggaggctcc tgcatggcag ttctgacagt gacactgatg gtgctgagct ccccactggc tttggctggg gacaccagac cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcggtgc ggttcctgga cagatacttc cataaccagg aggagttcgt gcgcttcgac agcgacgtgg gggagtaccg ggggtgacg gagctggggc ggcctgctgc ggagcactgg aacagccaga aggactcct ggagcggagg cgggccgagg tggacaccta ttgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag	60 120 180 240 300 360 370
<210> 255 <211> 246 <212> DNA <213> Homo sapiens	•

	· · · · · · · · · · · · · · · · · · ·	•
ggttcctg gggagta	255 ett ggagtactet acgtetgagt gteatttett caatgggaeg gagegggtge gga cagatactte cataaceagg aggagttegt gegettegae agegaegtgg aceg ggeggtgaeg gagetgggge ggeetgetge ggageaetgg aacageeaga eet ggageggagg egggeegagg tggaeaeta etgeagaeae aactaegggg	60 120 180 240
ttgtgg		246
<210>	256	
<211>	370	
<212>	DNA	
<213>	Homo sapiens	
<400>	256	
	gtc tgaggctccc tggaggctcc tgcatggcag ttctgacagt gacactgatg	<b>60</b> .
	get ecceaetgge tittggetggg gaeaecagae eaegtitett ggagtaetet	120
	agt gteatttett caatgggaeg gagegggtge ggtteetgga gagataette	180
	agg aggagaacgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg	240
	ggc ggcctgatgc cgagtactgg aacagccaga aggacctcct ggagcagagg	300
	egg tggacaccta etgeagacae aactaegggg ttggtgagag etteacagtg	360
cagcggc	gag	370
<210>	257	
<211>	370	
<212>	DNA	
<213>	Homo sapiens	
<400>	257	
	gtc tgaggctccc tggaggctcc tgcatggcag ttctgacagt gacactgatg	60
		120
	agt gtcatttctt caatgggacg gagcgggtgc ggttcctgga gagatacttc	180
	agg aggagaacgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg	240
	ggc ggcctgatgc cgagtactgg aacagccaga aggacctcct ggaagacagg	300
cgggccc	tgg tggacaccta ctgcagacac aactacgggg ttggtgagag cttcacagtg	360
cagcggc	gag	370
2010s	050	
<210>	258- 370	
<211><212>	DNA	
<213>	Homo sapiens	
1210-	Tionio sapions	
<400>	258	
atggtgt	gtc tgaggetece tggaggetec tgeatggeag ttetgaeagt gaeactgatg	60
gtgctga	get ecceaetgge tttggetggg gacaccagae eacgtttett ggagtaetet	120
	agt gttatttett caatgggaeg gagegggtge ggtteetgga cagataette	180
	agg aggagttcgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg	240
	gge ggeetgetge ggageaetgg aacageeaga aggaceteet ggageggagg	300
	agg tggacaccta ttgcagacac aactacgggg ttgtggagag cttcacagtg	360
cagcggc	gag	370
<210>	259	
<211>	270	
<212>	DNA	•
<213>	Homo sapiens	
<400>	259	
	ett ggagtactet acgtetgagt gteaattett caatgggaeg gagegggtge	60
	gga cagatacttc cataaccagg aggagttcgt gcgcttcgac agcgacgtgg	120
	accg ggcggtgacg gagctggggc ggcctgatgc tgagtactgg aacagccaga	180
aggacct	cct ggagcggagg cgggccgagg tggacaccta ttgcagacac aactacgggg	240

ttgtggagag cttcacagtg cagcggcgag	270	
<210> 260 <211> 270 <212> DNA		
<213> Homo sapiens		
<400> 260cacgtttctt ggagtactct acgtctgagt gtcaattctt caatgggacg gaggttcctgga cagatacttc cataaccagg aggagttcgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagcaga aggacctcct ggagcggagg cgggccgagg tggacaccta ttgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag	gcgggtgc 120 180 240 270	60
<210> 261 <211> 270 <212> DNA <213> Homo sapiens		
<400> 261 cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgag gagataette cataaceagg aggagaaegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetggge ggeetgatge egagtaetgg aacageeaga aggaeeteet ggageagagg egggeegegg tggaeaceta etgeagaeae aactaegggg ttgtggagag etteacagtg eageggegag	60 120 180 240 270	
<210> 262 <211> 269 <212> DNA <213> Homo sapiens		
<400> 262 cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga cagataette cataaceagg aggagttegt gegettegae agegaegtgg ggagtaeeg ggeggtgaeg gagetgggge ggeetgetge ggageaetgg aacageeaga aggaeeteet ggageggagg egggeegagg tggaeaeeta ttgeagaeae aactaegggg ttggtgagag etteacagtg eageggega	60 120 180 240 269	
<210> 263 <211> 270 <212> DNA <213> Homo sapiens <400> 263 cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc	60	
ggtteetgga cagatactte cataaccagg aggagttegt gegettegae agegaegtgg gggagtaceg ggeggtgaeg gagetgggge ggeetgetge ggageaetgg aacagecaga aggaeeteet ggageggagg egggeegagg tggaeaecta ttgeagaeae aactaegggg ttggtgagag etteaeggtg eageggegag	120 180 240 270	
<210> 264 <211> 269 <212> DNA <213> Homo sapiens		
<400> 264 cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc cataaccagg aggagttcgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctgatgc ggagcactgg aacagccaga aggacctcct ggagcggagg cgggccgagg tggacacta ttgcagacac aactacgggg	60 120 180 240	

ttgtggagag cttcacagtg cagcggcga	
<210> 265 <211> 266 <212> DNA <213> Homo sapiens	
<400> 265 tttcttggag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt cctggacaga tacttccata accaggagga gaacgtgcgc ttcgacagcg acgtgggga gtaccgggcg gtgacggagc tggggcggcc tgatgccgag tactggaaca gccagaagga cctcctggag cagaggcggg ccgcggtgga cacctactgc agacacaact acggggttgg tgagagcttc acagtgcagc ggcgag	60 120 180 240 266
<210> 266 <211> 261 <212> DNA <213> Homo sapiens	
<400> 266 ttcttggagc aggttaaaca tgagtgtcat ttcttcaatg ggacggagcg ggtgcggttc ctggacagat acttccataa ccaggaggag ttcgtgcgct tcgacagcga cgtgggggag taccgggcgg tgacggagct ggggcggcct gctgcggagc actggaacag ccagaaggac ctcctggagc ggaggcgggc cgaggtggac acctattgca gacacaacta cggggttgtg gagagcttca cagtgcagcg g	60 120 180 240 261
<210> 267 <211> 235 <212> DNA <213> Homo sapiens	
<400> 267 gagtactcta cgggtgagtg ttatttcttc aatgggacgg agcgggtgcg gttcctggac agatacttcc ataaccagga ggagttcgtg cgcttcgaca gcgacgtggg ggagtaccgg gcggtgacgg agctggggcg gcctgatgag gagtactgga acagccagaa ggacctcctg gagcggaggc gggccgaggt ggacacctat tgcagacaca actacgggt tgtgg	60 120 180 235
<210> 268 <211> 224 <212> DNA <213> Homo sapiens	
<400> 268 gtctgagtgt catttcttca atgggacgga gcgggtgcgg ttcctggaga gatacttcca taaccaggag gagaacgtgc gcttcgacag cgacgtgggg gagtaccggg cggtgacgga gctggggcgg cctgatgccg agtactggaa cagccagaag gacctcctgg aagacaggcg ggccctggtg gacacctact gcagacacaa ctacggggtt gtgg	60 120 180 224
<210> 269 <211> 235 <212> DNA <213> Homo sapiens	
<400> 269 gagtacteta cgtetgagtg teatttette aatgggaegg agegggtgeg gtteetggag	60

gcggtga	tcc ataaccagga ggagaacgtg cgcttcgaca gcgacgtggg ggagtaccgg .cgg agctggggcg gcctagcgcc gagtactgga acagccagaa ggacctcctg aggc gggccgcggt ggacacctac tgcagacaca actacggggt tggtg	120 180 235
<210> <211> <212> <213>	270 255 DNA Homo sapiens	
ctggaca taccggg ctcctgga	270 agt actctacgte tgagtgteat ttetteaatg ggaeggageg ggtgeggtte gat actteeataa ceaggaggag ttegtgeget tegaeagega egtgggggag egg tgaeggaget ggggegget gatgeegagt actggaacag eeagaaggae age ggaggegge egaggtggae acetattgea gaeacaacta eggggttggt etea eagtg	60 120 180 240 255
<210> <211> <212> <213>	271 247 DNA Homo sapiens	
cttccata gacggas	271 ggt gagtgttatt tetteaatgg gaeggagegg gtgeggttee tggaeagata lae eaggaggagt tegtgegett egaeagegae gtgggggagt aeegggeggt getg gggeggeetg atgeegagta etggaacage eagaaggaet teetggaaga ggee etggtggaea eetaetgeag acacaactae ggggttgtgg agagetteae	60 120 180 240 247
<210> <211> <212> <213>	272 240 DNA Homo sapiens	
gacagat cgggcgg	272 act ctacgtctga gtgtcatttc ttcaatggga cggagcgggt gcggttcctg cact tccataacca ggaggagttc gtgcgcttcg acagcgacgt gggggagtac ctga cggagctggg gcggcctgct gcggagcact ggaacagcca gaaggacatc cacg agcgggccgc ggtggacacc tactgcagac acaactacgg ggttgtggag	120 180 240
<210> <211> <212> <213>	273 266 DNA Homo sapiens	
ggttcctg gggagtt aggacct	273 ctt ggagtactet acgtetgagt gtcatttett caatgggacg gagegggtge gga cagatactte cataaccagg aggagaacgt gegettegae agegaegtgg ccg ggeggtgacg gagetgggge ggeetgatge egagtactgg aacagecaga cct ggageagagg egggeegegg tggacaceta etgeagaeae aactaegggg gag etteacagtg eagegg	60 120 180 240 266
<210><211><211><212><213>	274 258 DNA Homo sapiens	

<400> 274 gagtactcta cgtctgagtg tcatttcttc aatgggacgg agcgggtgcg gttcctggag agatacttcc ataaccagga ggagaacgtg cgcttcgaca gcgacgtggg ggagtaccgg gcggtgacgg agctggggcg gcctgatgct gagtactgga acagccagaa ggacctcctg gagcggaggc gggccgaggt ggacacctat tgcagacaca actacggggt tgtggagagc ttcacagtgc agcggcga	60 120 180 240 258
<210> 275 <211> 270 <212> DNA <213> Homo sapiens	
<400> 275 ggggacacca gaccacgttt cttggagtac tctacgtctg agtgtcattt cttcaatggg acggagcggg tgcggttcct ggagagatac ttccataacc aggaggagaa cgtgcgcttc gacagcgacg tgggggagta ccgggcggtg acggagctgg ggcggcctga tgccgagtac tggaacagcc agaaggacct cctggagcag aagcgggccg cggtggacac ctactgcaga cacaactacg gggttggtga gagcttcaca	60 120 180 240 270
<210> 276 <211> 241 <212> DNA <213> Homo sapiens	
<400> 276 ttggagtact ctacgtctga gtgtcatttc ttcaatggga cggagcgggt geggttcctg gagagatact tccataacca ggaggagttc gtgcgcttcg acagcgacgt gggggagtac cgggcggtga cggagctggg gcggcctgat gccgagtact ggaacagcca gaaggacctc ctggagcaga ggcgggccgc ggtggacacc tactgcagac acaactacgg ggttgtggag a	60 120 180 240 241
<210> 277 <211> 241 <212> DNA <213> Homo sapiens	
<400> 277 ttggagtact ctacgtctga gtgtcatttc ttcaatggga cggagcggt gcggttcctg gacagatact tccataacca ggaggagaac gtgcgcttcg acagcgacgt gggggagttc cgggcggtga cggagctggg gcggcctgat gccgagtact ggaacagcca gaaggacctc ctggagcaga agcgggccgc ggtggacacc tactgcagac acaactacgg ggttgtggag a	60 120 180 240 241
<210> 278 <211> 270 <212> DNA <213> Homo sapiens	
<400> 278 cacgtttctt ggagtactct acgtetgagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc cataaccagg aggagttcgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctgctgc ggagcactgg aacagccaga aggacttcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg ttggtgagag cttcacagtg cagcggcgag	60 120 180 240 270
<210> 279 <211> 270	

<212> <213>	DNA Homo sapiens		
ggtteetg gggagta aggaeet	279  tt ggagtactet acgtetgagt gteatttett eaatgggaeg gagegggtge gga eagatactte eataaceagg aggagttegt gegettegae agegaegtgg aceg ggeggtgaeg gagetggge ggeetgatge egagtaetgg aacageeaga eet ggageggagg egggeegagg tggacaceta ttgeagaeae aactaegggg gag etteacagtg eageggegag	60 120 180 240 270	
<210> <211> <212> <213>			
taccggg atcctgga	280ttcttggagt actctacgtc tgagtgtcat ttcttcaatg ggacggagcg ggtgat acttccataa ccaggaggag aacgtgcgct tcgacagcga cgtgggggag cgg tgacggagct ggggcggcct gatgccgagt actggaacag ccagaaggac agc aggcgcggc cgcggtggac acctactgca gacacaacta cggggttggt ctca cagtgcagcg gcgag	tgcggttc 120 180 240 265	60
<210><211><211><212><213>	281 266 DNA Homo sapiens		
cctggac gtaccgg cttcctgg	281 ag tactctacgt ctgagtgtca tttcttcaat gggacggage gggtgcggtt aga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtgggga gcg gtgacggagc tggggcggcc tgctgcggag cactggaaca gccagaagga gaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgg ettc acagtgcagc ggcgag	60 120 180 240 266	
<210> <211> <212> <213>	282 270 DNA Homo sapiens		
agtteetg gggagta aggaeet	282 ctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc gga cagatacttc cataaccagg aggagttcgt gcgcttcgac agcgacgtgg accg ggcggtgacg gagctggggc ggcctgctgc ggagcactgg aacagccaga acct ggagcggagg cgggccgagg tggacaccta ttgcagacac aactacgggg gag cttcacagtg cagcggcgag	60 120 180 240 270	
<210> <211> <212> <213>	283 270 DNA Homo sapiens		
cacgttto ggttcctg gggagta aggactt	283 ctt ggagtactet acgtetgagt gteatttett eaatgggaeg gagegggtge gga gagataette eataaceagg aggagaaegt gegettegae agegaegtgg aceg ggeggtgaeg gagetgggge ggeetgatge egagtaetgg aacageeaga eet ggaagaeagg egggeeetgg tggaeaeeta etgeagaeae aactaegggg gag etteaeagtg eageggegag	60 120 180 240 270	

•	
<211> 257	
<212> DNA	
<213> Homo sapiens	
.400- 004	
<400> 284 cacgtttctt ggagtactct acgggtgagt gttatttctt caatgggacg gagcgggtgc	60
ggttcctgga cagatactic cataaccagg aggagttcgt gcgcttcgac agcgacgtgg	120
gggagtaceg ggeggtgacg gagetgggge ggeetgetge ggageaetgg aacageeaga	
aggacetect ggageggagg egggeegagg tggacaceta ttgcagacac aactaegggg	240
ctgtggagag cttcaca	257
<210> 285	
<211> 270	
<212> DNA	
<213> Homo sapiens	
<400> 285	00
cacettett ggagtaetet acetegagt gteattett caatgggaeg gagegggtge	60 120
ggttcctgga gagatacttc cataaccagg aggagaacgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga	180
aggacetect ggagcagagg eggecegegg tggacaceta etgeagacae aactaegggg	240
ctgtggagag cttcacagtg cagcggcgag	270
<210> 286	
<211> 253	
<212> DNA	
<213> Homo sapiens	
<400> 286	
tttcttggag tactctacgt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt	60
cctggacaga tacttccata accaggagga gaacgtgcgc ttcgacagcg acgtggggga	120
gttccgggcg gtgacggagc tggggcggcc tgatgccgag tactggaaca gccagaagga	180
cctcctggag cagaggcggg ccgcggtgga cacctactgc agacacaact acggggttgg	240
tgagagette aca	253
<210> 287	
<211> 253	
<212> DNA	
<213> Homo sapiens	
<400> 287	
tttcttggag tactctacgg gtgagtgtta tttcttcaat gggacggagc gggtgcggtt	60
cctggacaga tacttccata accaggagga gttcgtgcgc ttcgacagcg acgtggggga	120
gtaccgggcg gtgacggagc tggggcggcc tgctgcggag cactggaaca gccagaagga	180
cctcctggag cggaggcggg ccgcggtgga cacctattgc agacacaact acggggttgt	$\begin{array}{c} 240 \\ 253 \end{array}$
ggagagette aca	200
<210> 288	
<211> 270	
<212> DNA	
<213> Homo sapiens	
<400> 288	
<400> 288 cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge	60
	120
cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga eagataette eataaceagg aggagttegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetgetge ggageaetgg aacageeaga	$120 \\ 180$
cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga eagataette eataaceagg aggagttegt gegettegae agegaegtgg	120

ttgtggagag cttcacagtg cagcggcgag	270
<210> 289 <211> 259 <212> DNA	
<213> Homo sapiens	
<400> 289 ttggagtact ctacgtctga gtgtcatttc ttcaatggga cggagcgggt gcggttcctg gacagatact tccataacca ggaggagaac gtgcgcttcg acagcgacgt gggggagttc cgggcggtga cggagctggg gcggcctgat gccgagtact ggaacagcca gaaggacctc ctggagcaga ggcgggccga ggtggacacc tactgcagac acaactacgg ggttgtggag agcttcacag tgcagcggc	60 120 180 240 259
<210> 290 <211> 270 <212> DNA <213> Homo sapiens	
<400> 290cacgtttctt ggagtactct acgtetgagt gtcatttctt caatgggacg gagggttcctgga cagatacttc cataaccagg aggagttcgt gcgettcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctgatgc ggagcactgg aacagccaga aggacctcct ggagcggagg cgggccgcgg tggacaccta ttgcagacac aactacgggg ttgtggagag cttcacagtg cagcggcgag	120
<210> 291 <211> 266 <212> DNA <213> Homo sapiens	
<400> 291 cacgtttctt ggagtactct acgtctgagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc cataaccagg aggagttcgt gcgcttcgac agcgacgtgg gggagttccg ggcggtgacg gagctggggc ggcctgctgc ggagcactgg aacagccaga aggacctcct ggagcggagg cgggccgagg tggacaccta ttgcagacac aactacgggg ttgtggagag cttcacagtg cagcgg	60 120 180 240 266
<210> 292 <211> 270 <212> DNA <213> Homo sapiens	
<400> 292 cacgtttett ggagtaetet aegtetgagt gteatttett caatgggaeg gagegggtge ggtteetgga cagataette cataaceagg aggagttegt gegettegae agegaegtge gggagtaeeg ggeggtgaeg gagetggge ggeetgatge eggataetgg aacageeaga aggaeeteet ggageggagg eggeegagg tggaeaceta ttgeagaeae aactaegggg ttggtgagag etteacagtg eageggegag	60 120 180 240 270
<210> 293 <211> 270 <212> DNA <213> Homo sapiens	
<400> 293 cacgtttett ggagtaetet acgtetgagt gteaattett eaatgggaeg gagegggtge ggtteetgga cagataette cataaccagg aggagttegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetggge ggeetgatge tgagtaetgg aacageeaga	60 120 180

aggacatect ggageaggeg egggeegeg tggacaceta etgeagacae aactaegggg ttgtggagag etteacagtg eageggegag	
<210> 294	
<211> 270	
<212> DNA	
<213> Homo sapiens	
<400> 294 cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gagegggtge ggtteetgga cagataette cataaceagg aggagttegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetgetge ggageaetgg aacageeaga	60 120 180
aggaceteet ggageggagg egggeegagg tggacaatta etgeagacac aactaegggg ttgtggagag etteacagtg eageggegag	240 270
<210> 295	
<211> 270	
<212> DNA	
<213> Homo sapiens	
<400> 295	
cacgtttctt ggagtaccct acgtetgagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc cataaccagg aggagttcgt gcgcttcgac agcgacgtgg	60 120
gggagtaccg ggcggtgacg gagctggggc ggcctgctgc ggagcactgg aacagccaga	180
aggaceteet ggageggagg egggeegagg tggacaceta ttgcagacac aactaegggg	240
ttgtggagag cttcacagtg cagcggcgag	270
<210> 296	
<211> 270	
<212> DNA	
<213> Homo sapiens	
<400> 296	
cacgtttett ggagtaetet acgtetgagt gteatttett eaatgggaeg gagegggtge	60
ggttcctgga gagatacttc cataaccagg aggagttcgt gcgcttcgac agcgacgtgg	120
gggagtaccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga	180
aggaceteet ggaagacagg egggeeetgg tggacaceta etgcagacac aactaegggg	240
ttggtgagag cttcacagtg cagcggcgag	270
<210> 297	
<211> 269	
<212> DNA	
<213> Homo sapiens	
<400> 297	
cacgtttett ggagtaetet acgtetgagt gteatttett caatgggaeg gagegggtge	60
ggttcctgga gagatacttc cataaccagg aggagttcct gcgcttcgac agcgacgtgg	120
gggagtaccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga	180
aggaceteet ggageagagg egggeegeg tggacaceta etgeagacae aactaegggg ttggtgagag etteacagtg eageggega	$\begin{array}{c} 240 \\ 269 \end{array}$
010. 000	
<210> 298 <211> 270	
<211> 270 <212> DNA	
<213> Homo sapiens	
<400> 298	<b>C</b> O
cacgtttett ggagtaetet aegtetgagt gteatttett caatgggaeg gagegggtge ggtteetgga eagataette tataaceaag aggagtaegt gegettegae agegaegtgg	60 120

gggagttccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga aggacctcct ggagcggagg cgggccgagg tggacaccta ttgcagacac aactacgggg ttggtgagag cttcacagtg cagcggcgag 240	)
<210> 299 <211> 270 <212> DNA <213> Homo sapiens	
<400> 299 cacgtttett ggagtactet acgtetgagt gteaattett caatgggaeg gagegggtge ggtteetgga eagatactte cataaceagg aggagttegt gegettegae agegaegtgg ggggggagtaeeg ggegtgaeg gagetggge ggeetgatge tgagtaetgg aacageeaga aggaecteet ggageggagg egggeegagg tggaegeeta ttgeagaeae aactaegggg ttgtggagag etteaeagtg eageggegag 120 180 240 240 ttgtggagag etteaeagt eageggegag 27	
<210> 300 <211> 270 <212> DNA <213> Homo sapiens	
<400> 300cacgtttett ggagtactet acgtetgagt gteaattett eaatgggaeg gagegggtg ggtteetga eagatactte eataaceagg aggagttegt gegettegae agegaegtgg 120 gggagtaceg ggeggtgaeg gagetggge ggeetgatge tgagtactgg aacageeaga aggaecteet ggageggagg egggeegagg tggacaceta ttgeagaeae aactaegggg 240 ttggtgagag etteaeagtg eageggegag	1
<210> 301 <211> 270 <212> DNA <213> Homo sapiens	
<400> 301 cacegtttett ggagtaetet acgtetgagt gteaattett eaatgggaeg gagegggtge ggtteetga eagataette eataaceagg aggagttegt gegettegae agegagtgg gggggggagtaeeg ggeggggage ggeetgatge tgagtaetgg aacageeaga aggaeateet ggageggagg eggeegagg tggaeaceta ttgeagaeae aactaeggg ttgtggagag etteaeagtg eageggegag 120 180 240 240 240 250	•
<210> 302 <211> 370 <212> DNA <213> Homo sapiens	
<400> 302 atggtgtgtc tgaagctccc tggaggctcc tgcatgacag cgctgacagt gacactgatg gtgctgagct ccccactggc tttgtctggg gacacccgac cacgtttcct gtggcagcct 120 aagagggagt gtcatttctt caatgggacg gagcggtgc ggttcctgga cagatacttc tataaccagg aggagtccgt gcgcttcgac agcgacgtgg gggagttccg ggcggtgacg gagctggggc ggctgacgc tgagtactgg aacagccaga aggacatcct ggagcaggcg cggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag cttcacagtg 360 cagcggcgag 360	870
<210> 303 <211> 266 <212> DNA <213> Homo sapiens	
<400> 303	

 ${\tt cacgtttcct\ gtggcagcct\ aagagggagt\ gtcatttctt\ caatgggacg\ gagcgggtgc}$ 

ggttcctgga cagatacttc tataaccagg aggagtccgt gcgcttcgac agcgacgtgg gggagttccg ggcggtgacg gagctggggc ggcctgacgc tgagtactgg aacagccaga aggacatcct ggagcaggcg cgggccgcgg tggacaccta ctgcagacac aactacggag ttgtggagag cttcacagtg cagcgg	120 180 240 266
<210> 304 <211> 266 <212> DNA <213> Homo sapiens	
<400> 304 cacgtttect gtggcagect aagagggagt gteatttett eaatgggaeg gagegggtge ggtteetgga eagatactte tataaceagg aggagteegt gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetggge ggeetgaege tgagtaetgg aacageeaga aggaeateet ggageaggeg egggeegegg tggaeaceta ttgeagaeae aactaegggg ttgtggagag etteacagtg eagegg	60 120 180 240 266
<210> 305 <211> 270 <212> DNA <213> Homo sapiens	
<400> 305 cacgttteet gtggcageet aagagggagt gteatttett eaatgggaeg gagegggtge ggtteetgga eagataette tataaceagg aggagteegt gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetggge ggeetgatge egagtaetgg aacageeaga aggaeateet ggageaggeg egggeegegg tggaeaceta etgeagaea aactaegggg ttgtggagag etteacagtg eageggegag	60 120 180 240 270
<210> 306 <211> 283 <212> DNA <213> Homo sapiens	
<400> 306 ggggacaccc gaccacgttt cctgtggcag cctaagaggg agtgtcattt cttcaatggg acggaggggt tgcggttcct ggacagatac ttctataacc aggaggagtc cgtgcgcttc gacagcacg tgggggagtt ccgggcggtg acggagctgg ggcggcctga cgctgagtac tggaacagcc agaaggacat cctggagcag gcgcgggccg cggtggacac ctactgcaga cacaactacg gggttggtga gagcttcaca gtgcagcgc gag	60 120 180 240 283
<210> 307 <211> 220 <212> DNA <213> Homo sapiens	
<400> 307 gagtgteatt tetteaatgg gaeggagegg gtgeggttee tggacagata ettetataac caggaggagt cegtgegett egacagegae gtgggggagt teegggeggt gaeggagetg gggeggeetg atgeegagta etggaacage eagaaggaea teetggagea ggeggggee geggtggaca cetaetgeag acacaactae ggggttggtg	60 120 180 220
<210> 308 <211> 246 <212> DNA <213> Homo sapiens	

<210> 309 <211> 283 <212> DNA

<213> Homo sapiens

<400> 309

ttggtg

ggggacaccc gaccacgttt cctgtggcag cctaagaggg agtgtcattt cttcaatggg acggagggg tgcggttcct ggacagacac ttctataacc aggaggagtc cgtgcgcttc gacagcgacg tgggggagtt ccgggcggtg acggagctgg ggcggcctga cgctgagtac tggaacagcc agaaggacat cctggagcag gcgcgggccg cggtggacac ctactgcaga cacaactacg gggttgtgga gagcttcaca gtgcagcggc gag

aggacatect ggageaggeg egggeegegg tggacaceta etgeagacae aactaegggg

<210> 310 <211> 255 <212> DNA

<213> Homo sapiens

310ttcctgtggc agcctaagag ggagtgtcat ttcttcaatg ggacggagcg ggtgcggttc 60 ctggacagat acttetataa ccaggaggag teegtgeget tegacagega egtgggggag ttccgggcgg tgacggagct ggggcggcct gacgctgagt actggaacag ccagaaggac 180 ttcctggagc aggcggggc cgcggtggac acctactgca gacacaacta cggggttgtg 240 gagagettea cagtg 255

<210> 311 <211> 261 <212> DNA <213> Homo sapiens

<400> tteetgtgge ageetaagag ggagtgteat ttetteaatg ggaeggageg ggtgeggtte 60 120 ctggacagat acttetataa ccaggaggag tccgtgcgct tcgacagcga cgtgggggag ttccgggcgg tgacggagt ggggcgcct gacgctgagt actggaacag ccagaaggac ctcctggagc aggcgcgggc cgcggtggac acctactgca gacacaacta cggggttgtg 240 gagagettea cagtgeageg g

180 261

<210> 312 <211> 262 <212> DNA <213> Homo sapiens

<400>

ctgtggcagc ctaagaggga gtgtcatttc ttcaatggga cggagcgggt gcggttcctg gacagatact tetataacca ggaggagtee gtgegetteg acagegacgt gggggagtte cgggcggcga cggagctggg gcggcctgac gctgagtact ggaacagcca gaaggacatc ctggagcagg cgcgggccgc ggtggacacc tactgcagac acaactacgg ggttgtggag agetteacag tgeageggeg ag

60

240 246

60 120

180

240 283

	•	
<211>	247	
<212> <213>	DNA Homo sapiens	
cctggac gtaccgg	313 gg cagcetaaga gggagtgtea tttetteaat gggaeggage gggtgeggtt aga taettetata accaggagga gteegtgege ttegaeageg aegtggggga geg gtgaeggage tggggeggee tgaegetgag taetggaaca geeagaagga gag eaggegeggg eegeggtgga eacetaetge agaeaeaaet aeggggttgt	60 120 180 240 247
<210> <211> <212> <213>	314 270 DNA Homo sapiens	
ggttcctg gggagtt agaacat	314 cet gtggcageet aagagggagt gteatttett caatgggaeg gagegggtge cga cagataette tataaceagg aggagteegt gegettegae agegaegtgg ceg ggeggtgaeg gagetgggge ggeetgaege tgagtaetgg aacageeaga ceet ggageaggeg egggeegegg tggacaceta etgeagaeae aactaegggg gag etteaeagtg cageggegag	60 120 180 240 270
<210><211><211><212><213>	315 270 DNA Homo sapiens	
ggttcctg gggagtt aggacat	315 cet gtggcageet aagagggagt gteatttett eaatgggaeg gagegggtge ega eagataette tataaceagg aggagteegt gegettegae agegaegtgg eea ggeggtgaeg gagetgggge ggeetgaege tgagtaetgg aacageeaga eeet ggageaggeg egggeegegg tggacaceta etgeagaeae aactaegggg gag etteaeagtg eageggegag	60 120 180 240 270
<210>	316	
<211><212>	248 DNA	
<213>	Homo sapiens	
tcctggae agttccg	tg gcagcctaag agggagtgte atttetteaa tgggaeggag egggtgeggt eag ataettetat aaccaggagg agteegtgeg ettegaeage gaegtggggg gge ggtgaeggag etggggegge etgaegetga gtaetggaae agceagaagg gga agaegagegg geegeggtgg acaectaetg eagaeacaae taeggggttg	60 120 180 240 248
<210> <211> <212> <213>	317 270 DNA Homo sapiens	
ggtteetg gggagta aggacat	317 cet gtggcagcet aagagggagt gtcatttett caatgggacg gagcgggtge cga cagatactte tataaccagg aggagteegt gegettegae agegacgtgg aceg ggeggtgaeg gagetgggge ggeetgaege tgagtaetgg aacagceaga ceet ggagcaggeg egggeegegg tggacaceta etgeagaeae aactaegggg gag etteacagtg cageggegag	60 120 180 240 270

<400> 322

<210> 318 <211> 271 <212> DNA <213> Homo sapiens <400> 318 gcacgtttcc tgtggcagcc taagagggag tgtcatttct tcaatgggac ggagcgggtg cggttcctgg acagatactt ctataaccag gaggagtccg tgcgttcga cagcgacgtg gggagttcc ggcggtgac ggagctggg cggctagcg ccgagtactg gaacagccag aaggacatcc tggagcaggc gcggccgcg gtggacacct actgcagaca caactacggg gttgtggaga gcttcacagt gcagcggcga g	60 120 180 240 271
<210> 319 <211> 263 <212> DNA <213> Homo sapiens	
<400> 319 cacgttteet gtggcageet aagagggagt gteatttett caatgggaeg gagegggtge ggtteetgga eagatactte tataaceagg aggagteegt gegettegae agegaegtgg gggagtteeg ggeggtgaeg gagetgggge ggeetgaege tgagtaetgg aacageeagg acateetgga geaggegegg geegeggtgg acacetaetg eagacacaac taeggggttg tggagagett cacagtgeag egg	60 120 180 240 263
<210> 320 <211> 370 <212> DNA <213> Homo sapiens	
<400> 320 atggtgtgtc tgaagctccc tggaggctcc tgcatgacag cgctgacagt gacactgatg gtgctgagct ccccactggc tttggctggg gacacccgac cacgtttcct gtggcagcct aagagggagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc tataaccagg aggagtccgt gcgcttcgac agcgacgtgg gggagtaccg ggggtgacg gagctggggc ggcctgacgc tgagtactgg aacagccaga aggacttcct ggaagacagg cgcgccgcgg tggacaccta ctgcagacac aactacgggg ttggtgagag cttcacagtg cagcggcgag	60 120 180 240 300 360
<210> 321 <211> 255 <212> DNA <213> Homo sapiens	
<400> 321 cgtttcctgt ggcagcctaa gagggagtgt catttcttca atgggacgga gcgggtgcgg ttcctggaca gatacttcta taaccaggag gagtccgtgc gcttcgacag cgacgtgggg gagtaccggg cggtgacgga gctggggcgg cctgacgctg agtactggaa cagccagaag gacttcctgg aagacaggcg ggccgcggtg gacacctact gcagacacaa ctacggggtt ggtgagagct tcaca	60 120 180 240 255
<210> 322 <211> 370 <212> DNA <213> Homo sapiens	

atggtgtgtc tgaagctccc tggaggctcc tgcatgacag cgctgacagt gacactgatg gtgctgagct ccccactggc tttggctggg gacacccgac cacgtttcct gtggcagcct aagagggagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc tataaccagg aggagtccgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctgacgc tgagtactgg aacagccaga aggacctcct ggaagacagg cgcgccgcgg tggacaccta ctgcagacac aactacgggg ttggtgagg cttcacagtg agcggcgag  300 360 cagcggcgag
<210> 323 <211> 242 <212> DNA <213> Homo sapiens
<400> 323 tttcctgtgg cagcctaaga gggagtgtca tttcttcaat gggacggage gggtgeggtt cettggacaga tacttctata accaggagga gtccgtgcgc ttcgacagcg acgtggggga gtaccgggcg gtgacggage tgggggggcc tgacgctgag tactggaaca gccagaagga cetcctggaa gacaggcggg ccgcggtgga cacctactgc agacacaact acggggttgg tg tg
<210> 324 <211> 370 <212> DNA <213> Homo sapiens
<400> 324 atggtgtgtc tgaagctccc tggaggctcc tgcatgacag cgctgacagt gacactgatg gtgctgagct ccccactggc tttggctggg gacacccgac cacgtttcct gtggcagcct 120 aagagggagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc 180 tataaccagg aggagtccgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctgacgc tgagtactgg aacagccaga aggacttcct ggaagacagg 300 gcgccgcggg tggacaccta ctgcagacac aactacggg ttggtgagag cttcacagtg cagcgggag 360 370
<210> 325 <211> 235 <212> DNA <213> Homo sapiens
<400> 325 tggcagccta agagggagtg tcatttcttc aatgggacgg agcgggtgcg gttcctggac agatacttct ataaccagga ggagtccgtg cgcttcgaca gcgacgtggg ggagtaccgg 120 gcggtgacgg agctggggg gcctgacgct gagtactgga acagccagaa ggacttcctg gaagacaggc gggccctggt ggacacctac tgcagacaca actacggggt tggtg 235
<210> 326 <211> 240<212> DNA <213> Homo sapiens
<400> 326 ctgtggcagc ctaagaggga gtgtcatttc ttcaatggga cggagcggt geggttcetg 60 gacagatact tctataacca ggaggagtcc gtgcgcttcg acagcgacgt gggggagtac 120 cgggcggtga cggagctggg gcggcctgac gctgagtact ggaacagca gaaggacatc ctggaagaca ggcgccgc ggtggacacc tactgcagac acaactacgg ggttggtgag 240
<210> 327 <211> 262 <212> DNA

<213> Homo sapiens	
<400> 327 cacgttteet gtggcageet aagagggagt gteatttett caatgggaeg gagegggtge ggtteegga cagatactte tataaceagg aggagteegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetgaege tgagtaetgg aacageeaga aggaeateet ggaagaeagg egegeegegg tggaeaceta etgeagaeae aactaegggg ttggtgagag etteacagtg ea	60 120 180 240 262
<210> 328 <211> 270 <212> DNA <213> Homo sapiens	
<400> 328 cacgtttcct gtggcagcct aagagggagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc tataaccagg aggagaacgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctgacgc tgagtactgg aacagccaga aggacttcct ggaagacagg cgcgccgcgg tggacaccta ctgcagacac aactacgggg ttggtgagag cttcacagtg cagcggcgag	60 120 180 240 270
<210> 329 <211> 283 <212> DNA <213> Homo sapiens	
<400> 329 ggggacaccc gaccacgttt cttggagctg cgtaagtetg agtgtcattt cttcaatggg acggagcggg tgcggtacct ggacagatac ttccataacc aggaggagtt cctgcgcttc gacagcgacg tgggggagta ccgggcggtg acggagctgg ggcggcctgt cgccgagtcc tggaacagcc agaaggacct cctggagcag aagcggggcc gggtggacaa ttactgcaga cacaactacg gggttggtga gagettcaca gtgcagcggc gag	60 120 180 240 283
<210> 330 <211> 370 <212> DNA <213> Homo sapiens	
<400> 330 atggtgtgtc tgaagctccc tggaggctcc agcttggcag cgttgacagt gacactgatg gtgctgagct cccgactggc tttcgctggg gacacccgac cacgtttctt ggagctgcgt aagtctgagt gtcatttctt caatgggacg gagcgggtgc ggtacctgga cagatacttc cataaccagg aggagttcct gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctgtcgc cgagtcctgg aacagccaga aggactcct ggagcagaag cggggccggg tggacaatta ctgcagacac aactacgggg ttggtgagag cttcacagtg cagcggcgag	60 120 180 240 300 360
<210> 331 <211> 264 <212> DNA <213> Homo sapiens	
<400> 331 ggggacaccc gaccacgttt cttggagetg cgtaagtetg agtgtcattt cttcaatggg acggagegg tgcggtacct ggacagatac ttccataacc aggaggagtt cctgcgettc gacagegacg tgggggagta ccgggeggtg acggagetgg ggeggeetgt tgccgagtcc tggaacagcc agaaggacct cctggageag aageggggee gggtggacaa ttactgcaga cacaactacg gggttggtga gage	60 120 180 240 264

	0577 102	101/012
-010-	000	
<210>	332 246	
<211><212>	DNA	
<213>	Homo sapiens	
~210>	Homo sapiens	
<400>	332	
	ett ggagetgegt aagtetgagt gteatttett caatgggaeg gagegggtge	60
	gga cagatactte cataaccagg aggagtteet gegettegae agegaegtgg	120
	accg ggcggtgacg gagctggggc ggcctgtcgc cgagtcctgg aacagccaga	180
	cct ggagcagaag cggggccggg tggacaatta ctgcagacac aactacggag	240
ttggtg		246
-0.10-	000	
<210> <211>	333 264	
<211><212>	DNA	
<213>	Homo sapiens	
\210×	Tomo sapiens	
<400>	333	
ggggaca	acce gaccacgttt ettggagetg tgtaagtetg agtgteattt etteaatggg	60
acggago	eggg tgcggtacct ggacagatac ttccataacc aggaggagtt cctgcgcttc	120
	acg tgggggagta ccgggcggtg acggagctgg ggcggcctgt cgccgagtcc	180
	gcc agaaggacct cctggagcag aagcggggcc gggtggacaa ttactgcaga	240
cacaact	acg gggttggtga gagc	264
<210>	334	
<211>	251	
<212>	DNA	
<213>	Homo sapiens	
<400>	334	
	ett ggagetgegt aagtetgagt gteatttett caatgggaeg gagegggtge	60
	gga gagatacttc cataaccagg aggagttcct gcgcttcgac agcgacgtgg	120
	accg ggcggtgacg gagctggggc ggcctgtcgc cgagtcctgg aacagccaga	180
	cct ggagcagaag cggggccggg tggacaatta ctgcagacac aactacgggg	240
ttggtga		251
<210>	335	
<211>	257	
<211>	DNA	
<213>	Homo sapiens	
	2.0.2.0 tup	
<400>	335	
_	etc ggagetgegt aagtetgagt gteatttett caatgggaeg gagegggtge	60
	gga cagatacttc cataaccagg aggagttcct gcgcttcgac agcgacgtgg	120
	accg ggcggtgacg gagctggggc ggcctgtcgc cgagtcctgg aacagccaga	180
	cct ggagcagaag cggggccggg tggacaatta ctgcagacac aactacgggg	240
ttggtga	gag etteaca	257
<210>	336	
<211>	268	
<212>	DNA	
<213>	Homo sapiens	
<400>	336	
	ett ggagetgegt aagtetgagt gteatttett caatgggaeg gagegggtge	60
	the generate acts acts account a grant took angest and a grant and	190

cacgtttett ggagetgegt aagtetgagt gteatttett caatgggaeg gagegggtge ggtacetgaa cagatactte cataaceagg aggagtteet gegettegae agegaegtgg

gggagtaccg ggcggtgacg gagctggggc ggcctgtcgc cgagtcctgg aacagccaga aggacctcct ggagcagaag cggggccggg tggacaatta ctgcagacac aactacgggg ttggtgagag cttcacagtg cagcggcg	180 240 268
<210> 337 <211> 246 <212> DNA <213> Homo sapiens	
<400> 337 cacgtttctt ggagctgcgt aagtetgagt gteatttett eaatgggaeg gagegggtge ggtacetgga eagatactte eataaceagg aggagttegt gegettegae agegaegtgg ggagtaeeg ggeggtgaeg gagetgggge ggeetgtege egagteetgg aacageeaga aggaceteet ggageagaag eggggeeggg tggacaatta etgeagaeae aactaegggg ttggtg	60 120 180 240 246
<210> 338 <211> 246 <212> DNA <213> Homo sapiens	
<400> 338 cacgtttctt ggagctgcgt aagtetgagt gteatttett caatgggaeg gagcgggtge ggtacetgga eagatactte cataaceagg aggagtaege gegettegae agegaegtgg gggagtaeeg ggeggtgagg gagetgggge ggeetgatge egagtaetgg aacageeaga aggaeeteet ggageagaag eggggeeagg tggaeaatta etgeagaeae aactaegggg ttggtg	60 120 180 240 246
<210> 339 <211> 266 <212> DNA <213> Homo sapiens	
<400> 339 cacgtttett ggagetgegt aagtetgagt gteatttett caatgggaeg gagegggtge ggtacetgga cagatactte cataaceagg aggagaacgt gegettegae agegaegtgg gggagtaceg ggeggtgaeg gagetggge ggeetgtege egagteetgg aacageeaga aggaceteet ggageagaag eggggeeggg tggacaatta etgeagaeae aactaegggg ttggtgagag etteacagtg eagegg	60 120 180 240 266
<210> 340 <211> 266 <212> DNA <213> Homo sapiens	
<400> 340cacgtttctt ggagctgcgt aagtetgagt gtcatttctt caatgggacg gaggttcctgga gagacacttc cataaccagg aggagtacgc gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctgtcgc cgagtcctgg aacagccaga aggacctcct ggagcagaag cggggccggg tggacaatta ctgcagacac aactacgggg ttggtgagag cttcacagtg cagcgg	gegggtge 60 120 180 240 266
<210> 341 <211> 246 <212> DNA <213> Homo sapiens	

<400> 341	
cacgtttett ggagetgegt aagtetgagt gteatttett caatgggaeg gagegggtge ggtacetgga eagatactte cataaceagg aggagtteet gagettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetgtege egagteetgg aacageeaga	60 120 180
aggaceteet ggageagaag eggggeeggg tggacaatta etgeagacae aactaegggg ttggtg	240 246
<210> 342 <211> 370	
<212> DNA	
<213> Homo sapiens	
<400> 342	
atggtgtgtc tgaagctccc tggaggctcc agcttggcag cgttgacagt gacactgatg gtgctgagct cccgactggc tttcgctggg gacacccgac cacgtttctt ggagctgctt 1	60 1 <b>2</b> 0
aagtetgagt gteatttett caatgggaeg gagegggtge ggtteetgga gagacaette	180
cataaccagg aggagtacge gegettegae agegaegtgg gggagtaceg ggeggtgagg	240 300
gagetgggge ggeetgatge egagtaetgg aacagecaga aggaceteet ggageagaag eggggeeagg tggacaatta etgeagacae aactaegggg ttgtggagag etteacagtg	360
cagcggcgag	370
<210> 343	
<211> 283 <212> DNA	
<213> Homo sapiens	
<400> 343	
ggggacaccc gaccacgttt cttggagetg cttaagtetg agtgtcattt cttcaatggg	60
acggagcggg tgcggttcct ggagagacac ttccataacc aggaggagta cgcgcgttc gacagcgacg tgggggagta ccgggcggtg agggagctgg ggcggcctga tgccgagtac	$\frac{120}{180}$
tggaacagcc agaaggacct cctggagcag aagcggggcc aggtggacaa ttactgcaga	$\begin{array}{c} 240 \\ 283 \end{array}$
cacaactacg gggttggtga gagcttcaca gtgcagcggc gag	200
<210> 344.	i.
<211> 246	
<212> DNA <213> Homo sapiens	
<400> 344 cacgtttett ggagetgett aagtetgagt gteatttett caatgggaeg gagegggtge	60
ggttcctgga gagacacttc cataaccagg aggagtacgc gcgcttcgac agcgacgtgg	120
gggagtaccg ggcggtgagg gagctggggc ggcctgatgc cgagtactgg aacagccaga aggacctcct ggagcagaag cggggccagg tggacaacta ctgcagacac aactacgggg	$\begin{array}{c} 180 \\ 240 \end{array}$
ttggtg	246
<210> 345 <211> 270	
<212> DNA	
<213> Homo sapiens	
<400> 345	00
cacgtttctt ggagctgctt aagtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga gagaeaette eataaceagg aggagtaege gegettegae agegaegtgg	$60 \\ 120$
gggagtaccg ggcggtgagg gagctggggc ggcctgatgc cgagtactgg aacagccaga	180
aggacetect ggageagaag eggggeeagg tggacaatta etgeaggeae aactaegggg ttggtgagag etteaeagtg eageggegag	$\begin{array}{c} 240 \\ 270 \end{array}$
ააგგაგოგოგ იააიობაგ აოგაგგაგოგ	_,,

<210> <211> <212> <213>	346 270 DNA Homo sapiens	
ggttcctg gggagta aggacct	346 Ett ggagetgett aagtetgagt gteatttett eaatgggaeg gagegggtge Ega gagaeaette cataaceagg aggagtaege gegettegae agegaegtgg Leeg ggeggtgagg gagetgggge ggeetgatge ggagtaetgg aacageeaga eet ggageagaag eggggeeagg tggaeaatta etgeagaeae aactaegggg gag etteaeagtg eageggegag	60 120 180 240 270
<210> <211> <212> <213>	347 241 DNA Homo sapiens	
gagagac cgggcgg	347 tgc ttaagtetga gtgtcattte tteaatggga eggagegggt geggtteetg eact tecataacea ggaggagtee gtgegetteg acagegacgt gggggagtae ttga gggagetggg geggeetgat geegagtaet ggaacageea gaaggacete aga ageggggeea ggtggacaat taetgeagae acaactaegg ggttggtgag	60 120 180 240 241
<210> <211> <212> <213>	348 270 DNA Homo sapiens	
ggtteetg gggagta aggaeet	348 ctt ggagctgett aagtetgagt gteatttett eaatgggaeg gagegggtge gga gagacaette cataaceagg aggagtaege gegettegae agegaegtgg aceg ggeggtgagg gagetgggge ggeetgatge egagtaetgg aacageeaga eet ggageagaag eggggeeggg tggacaacta etgeagaeae aactaegggg gag etteacagtg eageggegag	60 120 180 240 270
<210> <211> <212> <213>	349 261 DNA Homo sapiens	
ttcctgga gagtacc gacctcc	349 gg agctgettaa gtetgagtgt catttettea atgggaegga gegggtgegg aga gataetteea taaceaggag gagtaegge gettegaeag egaegtgggg egg eggtgaggga getggggegg eetgatgeeg agtaetggaa eagceagaag tgg agcagaageg gggeeaggtg gacaattaet geagaeaeaa etaeggggtt aget teacagtgea g	60 120 180 240 261
<210> <211> <212> <213>	350 246 DNA Homo sapiens	
ggttcctg	350 ett ggagetgett aagtetgagt gteatttett caatgggaeg gagegggtge gga gagaeaette cataaceagg aggagaaege gegettegae agegaegtgg aceg ggeggtgagg gagetgggge ggeetgatge egagtaetgg aacageeaga	60 120 180

aggaceteet ggageagaag eggggeeagg tggacaatta etgeagacac aactaegggg ttggtg	240 246
<210> 351 <211> 242 <212> DNA <213> Homo sapiens	
<400> 351 ttggagetge ttaagtetga gtgtcattte tteaatggga eggageggt geggtteetg gagagacaet teeataacea ggaggagtae geggetteg acagegaegt gggggagtae eggeeggtga gggagetggg geggeetgte geegagtaet ggaacageea gaaggacete etggageaga ageggggeea ggtggacaat taetgeagae acaactaegg ggttggtgag ag	60 120 180 240 242
<210> 352 <211> 246 <212> DNA <213> Homo sapiens	
<400> 352 cacgtttett ggagetgett aagtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga gagacaette eataaceagg aggagtaege gegettegae agegaegtgg gggagtaeeg ggeggtgagg gagetgggge ggeetagege egagtaetgg aacageeaga aggaceteet ggageagaag eggggeeagg tggacaatta etgeagaeae aactaegggg ttggtg	60 120 180 240 246
<210> 353 <211> 257 <212> DNA <213> Homo sapiens	
<400> 353 cacgtttctt ggagctgett aagtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga gagacaette cataaceagg aggagtaege gegettegae agegaegtgg ggagtaeeg ggeggtgaeg gagetggge ggeetgtege egagteetgg aacageeaga aggaceteet ggageagaag eggggeeagg tggacaatta etgeagaeae aactaegggg ttggtgagag etteaca	60 120 180 240 257
<210> 354 <211> 283 <212> DNA <213> Homo sapiens	
<400> 354 ggggacaccc gaccacgttt ettggagetg ettaagtetg agtgteattt etteaatggg acggageggg tgeggtteet ggagagacac tteeataacc aggaggagta egeggette gacagegacg tgggggagta eegggeggtg acggagetgg ggeggeetga tgeegagtac tggaacagec agaaggacet eetggageag aageggggee aggtggacaa ttaetgeaga cacaactacg gggttggtga gagetteaca gtgeagegge gag	60 120 1'80 240 283
<210> 355 <211> 283 <212> DNA <213> Homo sapiens	

acggago gacagog tggaaca	355 accc gaccacgttt cttggagctg cttaagtctg agtgtcattt cttcaatggg eggg tgcggttcct ggagagacac ttccataacc aggaggagta cgcggcttc gacg tgggggagta ccgggcggtg agggagctgg ggcggcctga tgccgagtac gcc agaaggacat cctggagcag aagcggggcc aggtggacaa ttactgcaga acg gggttggtga gagcttcaca gtgcagcggc gag	60 120 180 240 283
<010>	356	
<210><211>	356 270	
<212>	DNA	
<213>	Homo sapiens	
<400>	356 ett geagetgett aagtetgagt gteatttett caatgggaeg gagegggtge	60
ggtteetg gggagta aggaeet	ga gagacacttc cataaccagg aggagtacgc gcgcttcgac agcgacgtgg accg ggcggtgagg gagctggggc ggcctgatgc cgagtactgg aacagccaga act ggagcagaag cggggccagg tggacaatta ctgcagacac aactacgggg gag cttcacagtg cagcggcgag	120 180 240 270
<210><211>	357 270	
<211><212>	DNA	
<213>	Homo sapiens	
<400>	357	
	ett ggagetgett aagtetgagt gteatttett caatgggaeg gagegggtge	60
	gga gagacacttc cataaccagg aggagtacgc gcgcttcgac agcgacgtgg	120
aggacct	accg ggcggtgagg gagctggggc ggcctgatgc cgagtactgg aacagccaga cct ggagcagaag cggggccagg tggacaatta ctgcagacac aactacgggg gag cttcacagtg cagcggcgag	$180 \\ 240 \\ 270$
<210>	358	
<211>	270	
<212>	DNA	
<213>	Homo sapiens	
<400>	358	
_	ett ggagetgett aagtetgagt gteatttett caatgggaeg gagegggtge	60
	gga gagacacttc cataaccagg aggagtacgc gcgcttcgac agcgacgtgg	120
	accg ggcggtgagg gagctggggc ggcctgatgc cgagtactgg aacagccaga	180 240
	cct ggagcagaag cggggccagg tggacaatta ctgcagacac aactacgggg gag cttcacagtg cagcggcgag	270
<210>	359	
<210> <211>	270	
<211>	DNA	
<213>	Homo sapiens	
<400>	359	
	ett ggagetgett aagtetgagt gteatttett caatgggaeg gagegggtge	60
	gga gagacacttc cataaccagg aggagtacgc gcgcttcgac agcgacgtgg	120
	accg ggcggtgagg gagctggggc ggcctgatgc cgagtactgg aacagccaga	180
	cct ggagcagaag cggggccagg tggacaccta ctgcagacac aactacgggg gag cttcacagtg cagcggcgag	$\frac{240}{270}$
	9~9	
<210>	360	
<211>	270	
<212>	DNA	

<213> Homo sapiens	
<400> 360 cacgtttctt ggagctgctt aagtetgagt gteatttett caatgggaeg gagegggtge ggtteetgga gagacactte cataaccagg aggagtaege gegettegae agegaegtgg gggagtaecg ggeggtgagg gagetgggge ggeetgetge ggageaetgg aacagecaga aggaceteet ggageagaag eggggeeagg tggacaatta etgeagaeae aactaegggg ttggtgagag etteacagtg eageggegag	60 120 180 240 270
<210> 361 <211> 270 <212> DNA	
<213> Homo sapiens	
<400> 361 cacgtttett ggagetgett aagtetgagt gteatttett eaatgggaeg gagegggtge ggtteetgga gagacactte cataaccagg aggagtaege gegettegae agegaegtgg gggagtaeeg ggeggtgagg gagetgggge ggeetgatge egagtaetgg aacageeaga aggaetteet ggageagaag egggeeagg tggacaatta etgeagaeae aactaegggg ttggtgagag etteacagtg eageggegag	60 120 180 240 270
<210> 362	
<211> 283 <212> DNA	
<213> Homo sapiens	
<400> 362 ggggacaccc gaccacgttt cttggagctg cttaagtctg agtgtcattt cttcaatggg acggagcggg tgcggttcct ggagagatac ttccataacc aggaggagtt cgtgcgcttc gacagcgacg tgggggagta ccgggcggtg acggagctgg ggcggcctgt cgccgagtcc tggaacagcc agaaggacct cctggagcag aagcggggcc aggtggacaa ttactgcaga cacaactacg gggttgtgga gagcttcaca gtgcagcggc gag	60 120 180 240 283
<210> 363	
<211> 270	
<212> DNA <213> Homo sapiens	
<400> 363 cacgtttett ggagetgett aagtetgagt gteatttett caatgggaeg gagegggtge ggtteetgga gagataette cataaccagg aggagttegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetggge ggeetgtege egagteetgg aacageeaga aggaeeteet ggageagaag eggggeeagg tggacaatta etgeagaeae aactaeggeg ttgtggagag etteacagtg eageggegag	60 120 180 240 270
<210> 364 <211> 246 <212> DNA <213> Homo sapiens	
<400> 364 cacgtttett ggagetgett aagtetgagt gteatttett caatgggaeg gagegggtge ggtteetgag gagacaette cataaceagg aggagttegt gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetgtege egagteetgg aacageeaga aggaeeteet ggageagaag eggggeeagg tggaeaatta etgeagaeae aactaegggg ttgtgg	60 120 180 240 246

PCT/JP2004/019763

<211> 253	
<212> DNA	
<213> Homo sapiens	
<400> 365	
tttcttggag ctgcttaagt ctgagtgtca tttcttcaat gggacggagc gggtgcggtt	60
cctggagaga tacttccata accaggagga gttcgtgcgc ttcgacagcg acgtggggga	120 180
gtaccgggcg gtgacggagc tggggcggcc tgtcgccgag tcctggaaca gccagaagga cctcctggag cagaagcggg gccgggtgga caattactgc agacacaact acggggttgg	240
tgagagette aca	253
<210> 366	
<211> 370	
<212> DNA	ů.
<213> Homo sapiens	
<400> 366	
atggtgtgtc tgaagctccc tggaggctcc tgtatggcag cgctgacagt gacattgacg	60
gtgetgaget ecceaetgge tttggetggg gaeaeceaae eaegtttett ggageagget	120
aagtgtgagt gtcatttcct caatgggacg gagcgagtgt ggaacctgat cagatacatc	180
tataaccaag aggagtacge gegetacaac agtgacetgg gggagtacca ggeggtgacg	
gagetgggge ggcetgaege tgagtaetgg aacagecaga aggaceteet ggageggagg eggecgagg tggacaceta etgeagatae aactaegggg ttgtggagag etteacagtg	360
cagcggcgag	370
*010\ 00T	
<210> 367 <211> 220	
<211> 220 <212> DNA	
<213> Homo sapiens	
<400> 367	
gagcgagtgt ggaacctgat cagatacate tataaccaag aggagtacgc gcgctacaac	60
agtgacetgg gggagtacea ggeggtgacg gagetgggge ggeetgacge tgagtaetgg	120
aacagccaga aggaceteet ggageggagg egggeeggagg tgggcaceta etgcagatac	
aactacgggg ttgtggagag cttcacagtg cagcggcgag	220
<210> 368	
<211> 283	
<212> DNA	
<213> Homo sapiens	
<400> 368	
ggggacaccc aaccacgttt cttggagcag gctaagtgtg agtgtcattt cctcaatggg	60
acggagcgag tgtggaacct gatcagatac atctataacc aagaggagta cgcgcgctac	120
aacagtgacc tgggggagta ccaggcggtg acggagctgg ggcggcctga cgctgagtac	
tggaacagcc agaaggacct cetggagegg aggegggeeg aggtggacac etactgcaga tacaactacg gggttgtgga gagettcaca gtgcagegge gag	. 240 283
tacaactace egginetega basciicaca etgcaecego eag	200
<b>2010</b> 000	
<210> 369 <211> 370	
<211> 370 <212> DNA	
<213> Homo sapiens	
<400> 369 atggtgtgtc tgaagctcc tggaggctcc tgtatggcag cgctgacagt gacattgacg	60
gtgetgaget ecceaetgge tttggetggg gacacecaae eacgtttett ggageagget	120
aagtgtgagt gtcatttcct caatgggacg gagcgagtgt ggaacctgat cagatacatc	180
tataaccaag aggagtacge gegetacaae agtgacetgg gggagtacca ggeggtgacg	240

gagctggggc ggcctgacgc tgagtactgg aacagccaga aggacctcct ggagcggagg cgggccgagg tggacaccta ttgcagatac aactacgggg ttgtggagag cttcacagtg cagcggcgag	300 360 370
<210> 370 <211> 270 <212> DNA <213> Homo sapiens	
<400> 370cacgtttett ggagcagget aagtgtgagt gteattteet caatgggaeg gaggaacetgat cagatacate tataaceaag aggagtacge gegetacaae agtgatetgg gggagtacea ggeggtgaeg gagetgggge ggeetgaege tgagtaetgg aacageeaga aggaeeteet ggageggagg egggeegagg tggacaceta etgeagatae aactaegggg ttgtggagag etteacagtg eageggegag	120 180 240 270
<210> 371 <211> 270 <212> DNA <213> Homo sapiens	• ,
<400> 371 cacetttett ggageagget aagtgtgagt gteattteet eaatgggaeg gagegagtgt ggaacetgat eagatacate tataaceaag aggagtaege gegetaeaae agtgaeetgg gggagtaeea ggeggtgaeg gagetgggge ggeetgaege tgagtaetgg aacageeaga aggaeeteet ggageggagg egggeegagg tggaeaaeta etgeagatae aactaegggg ttgtggagag etteaeagtg eageggegag	60 120 180 240 270
<210> 372 <211> 242 <212> DNA <213> Homo sapiens	
<400> 372 ttggagcagg ctaagtgtga gtgtcatttc ctcaatggga cggagcgagt gtggaacctg atcagataca tctataacca agaggagtac gcgcgctaca acagtgacct gggggagtac caggcggtga cggagctggg gcggcctgac gctgagtact ggaacagcca gaaggacctc ctggagcgga ggcggccga ggtggacacc tactgcagac acaactacgg ggttgtggag ag	60 120 180 240 242
<210> 373 <211> 270 <212> DNA <213> Homo sapiens	
<400> 373 cacgtttett ggageagget aagtgtgagt gteattteet caatgggaeg gagegagtgt ggaacetgat cagatacate tataaceaag aggagtaege gegetaeaae agtgaeetgg ggagtaeea ggeggtgaeg gagetggge ggeetgaege tgagtaetgg aacageeaga aggaeeteet ggageggagg egggeegagg tggaeaceta etgeagatae aactaegggg ttgtggagag etteaeagtg cageggegag	60 120 180 240 270
<210> 374 <211> 300 <212> DNA <213> Homo sapiens	
<400> 374 ggtgctgagc tccccactgg ctttggctgg ggacacccaa ccacgtttct tggagcaggc taagtgtgag tgtcatttcc tcaatgggac ggagcctgat cagatacatc tataaccaag	60 120

aggagtacge gegetacaae agtgacetgg gggagtacea ggeggtgaeg gagetgggge ggeetgaege tgagtactgg aacageeaga aggaceteet ggageggagg egggeegagg tggacaceta etgeagatae aactaegggg ttgtggagag etteacagtg eageggegag	180 240 300
<210> 375 <211> 370	
<212> DNA <213> Homo sapiens	
<400> 375 atggtgtgtc tgaagctccc tggaggttcc tacatggcaa agctgacagt gacactgatg gtgctgagct ccccactggc tttggctggg gacacccgac cacgtttctt gcagcaggat aagtatgagt gtcatttctt caacgggacg gagcgggtgc ggttcctgca cagagacatc tataaccaag aggaggactt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggcctgacgc tgagtactgg aacagccaga aggacttcct ggaagacagg cgcgccgcgg tggacaccta ctgcagacac aactacgggg ttggtgagag cttcacagtg cagcggcgag	60 120 180 240 300 360 370
<210> 376 <211> 257	
<212> DNA <213> Homo sapiens	
<400> 376 cacgtttett geageaggat aagtatgagt gteatttett eaacgggaeg gagegggtge ggtteetgea eagagaeate tataaceaag aggaggaett gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetgggge ggeetgaege tgagtaetgg aacageeaga aggaetteet ggaagaeagg egggeegegg tggaeaceta etgeagaeae aactaegggg ttggtgagag etteaea	60 120 180 240 257
<210> 377 <211> 283 <212> DNA <213> Homo sapiens	
<400> 377 . ggggacaccc gaccacgttt cttgcagcag gataagtatg agtgtcattt cttcaacggg acggagcggg tgcggttcct gcacagaggc atctataacc aagaggagaa cgtgcgcttc gacagcgacg tgggggagta ccgggcggtg acggagctgg ggcggcctga cgctgagtac tggaacagcc agaaggactt cctggaagac aggcgcgccg cggtggacac ctactgcaga cacaactacg gggttggtga gagcttcaca gtgcagcggc gag	60 120 180 240 283
<210> 378 <211> 250 <212> DNA <213> Homo sapiens	
<400> 378  ttgcagcagg ataagtatga gtgtcatttc ttcaacggga cggagcgggt gcggttcctg cacagaggca tctataacca agaggagaac gtgcgcttcg acagcgacgt gggggagtac cgggcggtga cggagctggg gcggcctgac gctgagtact ggaacagcca gaaggacttc ctggaagaca cgcgcgccgc ggtggacacc tactgcagac acaactacgg ggttggtgag agcttcacag	60 120 180 240 250
<210> 379 <211> 283 <212> DNA <213> Homo sapiens	

<400> 379 ggggacaccc gaccacgttt cttgcagcag gataagtatg agtgtcattt cttcaacggg acggagcggg tgcggttcct gcacagagac atctataacc aagaggagga cttgcgcttc gacagcgacg tgggggagta ccgggcggtg acggagctgg ggcggcctga cgctgagtac tggaacagcc agaaggactt cctggaagac aggcgggccc tggtggacac ctactgcaga cacaactacg gggttggtga gagcttcaca gtgcagcgc gag	60 120 180 240 283
<210> 380 <211> 267 <212> DNA <213> Homo sapiens	
<400> 380ccacgtttct tgcagcagga taagtatgag tgtcatttct tcaacgggac ggacggttcetgc acagagacat ctataaccaa gaggaggacg tgcgcttcga cagcgacgtg ggggagtacc gggcggtgac ggagctgggg cggcctgacg ctgagtactg gaacagccag aaggacttcc tggaagacag gcgccgcg gtggacacct actgcagaca caactacggg gttggtgaga gcttcacagt gcagcgg	agcgggtg 60 120 180 240 267
<210> 381 <211> 269 <212> DNA <213> Homo sapiens	
<400> 381 cacgtttett geageaggat aagtatgagt gteatttett eaaegggaeg gagegggtge ggtteetgea eagagacate tataaceaag aggaggaett gegettegae agegaegtgg gggagtaceg ggeggtgaeg gagetgggge ggeetgaege tgagtaetgg aaeageeaga aggaeateet ggageaggeg egggeegegg tggaeaceta etgeagaea aactaegggg etgtggaga etteaeagtg eageggega	60 120 180 240 269
<210> 382 <211> 246 <212> DNA <213> Homo sapiens	
<400> 382 cacgtttett geageaggat aagtatgagt gteatttett caaegggaeg gagegggtge ggtteetgea eagagacate tataaceaag aggaggaett gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetggge ggeetgaege tgagtaetgg aaeageeaga aggaeateet ggaagaeagg egegeegegg tggaeaceta etgeagaeae aaetaegggg ttggtg	60 120 180 240 246
<210> 383 <211> 246 <212> DNA <213> Homo sapiens	
<400> 383 cacgtttett geageaggat aagtatgagt gteatttett eaaegggaeg gagegggtge ggtteetgea eagagaeate tataaceaag aggaggaett gegettegae agegaegtgg gggagtaeeg ggeggtgaeg gagetggge ggeetgaege tgagtaetgg aaeageeaga aggaetteet ggaaaaeagg egegeegegg tggaeaeeta etgeagaeae aaetaegggg ttggtg	60 120 180 240 246

-010> 204	
<210> 384	
<211> 268	
<212> DNA	
<213> Homo sapiens	
<400> 384	
	60
cacgtttctt gcagcaggat aagtatgagt gtcatttctt caacgggacg gagcgggtgc	120
ggttcctgca cagaggcatc tataaccaag aggagaacgt gcgcttcgac agcgacgtgg	
gggagtaccg ggcggtgacg gagctggggc ggcctgacgc tgagtactgg aacagccaga	
aggactteet ggaagacagg egegeegegg tggacaceta etgeacacaa etaeggggtt	240
ggtgagaget teacagtgea geggegag	268
<210> 385	
<211> 270	
<212> DNA	
<213> Homo sapiens	
220 Itomo ouprono	
<400> 385	
cacgtttett geageaggat aagtatgagt gteatttett caaegggaeg gagegggtge	60
ggttcctgca cagagacatc tataaccaag aggaggactt gcgcttcgac agcgacgtgg	120
gggagtaccg ggcggtgacg gagctggggc ggcctgacgc tgagtactgg aacagccaga	. 180
aggacatect ggagcaggeg egggeegegg tggacaceta etgeagacae aactaegggg	
ttggtgagag cttcacagtg cagcggcgag	270
<210> 386	
<211> 270	
<212> DNA	
<213> Homo sapiens	
•	
<400> 386	
cacgtttett geageaggat aagtatgagt gteatttett eaaegggaeg gagegggtge	<b>6</b> 0
ggttcctgca cagagacatc tataaccaag aggaggactt gcgcttcgac agcgacgtgg	120
gggagtaccg ggcggtgacg gagctggggc ggcctgacgc cgagtcctgg aacagccaga	180
aggacttcct ggagcggagg cgggccgagg tggacaccgt gtgcagacac aactacgggg	
ttggtgagag cttcacagtg cagcggcgag	270
<210> 387	•
<211> 370	
<212> DNA	
<213> Homo sapiens	
<400> 387	
	60
atggtgtgtc tgaageteec tggaggttee tacatggcag tgetgacagt gacactgatg	120
gtgctgaget ceceactggc tttggetggg gacaccegae catgttett geageaggat	180
aagtatgagt gtcatttctt caacgggacg gagcgggtgc ggttcctgca cagaggcatc	
tataaccaag aggagaacgt gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg	
gagetgggge ggeetgacge tgagtactgg aacagecaga aggacateet ggageaggeg	
cgggccgcgg tggacaccta ctgcagacac aactacgggg ctgtggagag cttcacagtg	360
cagcggcgag	370
<210> 388	
<211> 262	
<211> 262 <212> DNA	
<213> Homo sapiens	
<400> 388	
tttcttgcag caggataagt atgagtgtca tttcttcaac gggacggagc gggtgcggtt	60
cctgcacaga ggcatctata accaagagga gaacgtgcgc ttcgacagcg acgtggggga	
gtaccgggcg gtgacggagc tggggcggcc tgacgctgag tactggaaca gccagaagga	. 100

<213> Homo sapiens

<2110> 389         <2111> 257         <2121> DNA         <2123 Homo sapiens         <4000> 389         catgtttett geageaggat aagtatgagt geatteette caacgggaeg ggeggtee ggerdageeg ggeggteeggeggeggeggeggeggeggeggeggeggegg		gag caggegeggg cegeggtgga cacetactge agacacaact aeggggttgg ttc acagtgeage gg	240 262
<211> 257         <212> DNA         <213> Homo sapiens         <400> 389         catgtttett geageaggat aagtatgagt geatteett caaegggaeg ggteeteegaeggggggggggggggggggg	<b>∠210</b> >	380	
<212> DNA           <213> Homo sapiens           <400> 389           catgtttctt geageaggat aagtatgagt gteatttett caaegggaeg gaegggtge ggttectgee agagegget te tataaceaag aggaacate gegetteege gegtdeege ggeetgage ggeetgage gaggaegtee gggaeggege gggeegggegggggggggg		•	
<213> Homo sapiens         <400> 389       catgittett geageaggat aagtatgagt gteatttett eaacgggacg gageggtee ggettetgea eagaggat aagtatgagt gteatttett geageagtaeg ggettetga gagetggge ggetgage gagetggge ggeetgage ggeettgaacg tagtactteg aacagcaga aggactteet ggageagge ctgageetgage tagtacaca actacgggg ctgtggagag etteaca       60         2210> 390       2210> 390         <211> 270       2212> DNA         <2123  Homo sapiens		<del></del> ,	
<400>       389         catgtttett geageaggat aagtatgagt geatttett caacgggaeg gageggteg gettect ac aagaaggat aagtatgagt geagtteteg aagegagteg geggataacg gageggtegeggagteggaggaggaggggggggggggg		· · · · · · · · · · · · · · · · · · ·	
catgiticit geageaggat aagtatgagt gteattict eaeeggaeggaggggte ggtitectgea eageaggata aagtatgagt gteattict eaeeggaegtegg gteggatace ageaggaegteg gageaggaege ggeegtage geegtagee geegtagee geegtagee tagaacaca aactaceggg 240 240 257 212 210 390 211 270 212 DNA 213 Homo sapiens 400 390 eatgitiet geageaggaege gagetggge ggeegtage ggeegtagee ggeegtageegggggggggg		•	
ggttcctgca cagaggcatc tataaccaag aggagaacgt gegcttcgac aggagatgg gggagtaccg ggcggtacg gactggggc ggcctgacgc tagatactgg aacagccaga aggacttcct ggagcagcg cgggccgcgg tggacaccta ctgcagaca aactacggga ctgtggagag cttcaca  210 > 390 2211 > 270 2212 > DNA 2213 > Homo sapiens  4400 > 390 ggttcctgca cagaggat aagtatgagt gtcatttctt caacgggacg gagcggtgc ggttcctgca cagaggat ataacaag aggagaacgt gcgttcgac aagtatctgg aacagcagag gggagtaccg ggcggtacg gagctgggg gggggggggg			
gggagtaccg ggcggtgacg gactgggc ggcctgacgc tgagtactgg aacagcaaga aggacttcct ggagcaggc ggggcgcgg tggacaccta ctgcagaca aactacgggg 240 2257 <pre> <pre> <pre> <pre> ctgtggagag tctcaca </pre> <pre> <pre> <pre> ctgtggagag cttcaca </pre> <pre> ctgtggagag cttcaca </pre> <pre> ctgtggagag cttcaca </pre> <pre> ctgtggagag cttcaca </pre> <pre> ctgtgagagag cttcaca </pre> <pre> ctgtgagagag cttcaca </pre> <pre> ctgtpagagag cttcaca </pre> <pre> ctgtpagagag cttcaca </pre> <pre> ctgtpagagagagagagagagagagagagagagagagagag</pre></pre></pre></pre></pre></pre>			
aggacttcct gagcaggc cggccgcg tggacaccta ctgcagaca aactacgggg ctgtggagag cttcaca 257  <210> 390 <211> 270 <212> DNA <213> Homo sapiens  <400> 390 catgtttctt gcagcaggat aagtatgagt gtcatttctt caacgggacg gagcggtgc ggttcctgca cagaggat ctaaaccaa gaggagacgt gggggagagggggggggg			
ctgtggagag cttcaca       257         <210> 390       <211> 270         <212> DNA       <213> Homo sapiens         <400> 390       catgtttcttg cagcaggat aagtatgagt gtcatttctt caacgggacg gagcggtgc ggggaggaggaggagggggggggg			
<210> 390 <211> 270 <212> DNA <213> Homo sapiens <400> 390 catgtttctt geagcaggat aagtatgagt gtcatttett caacggacg gagcggtgc ggttectgea cagaggcate tataaccaag aggagaacgt gegettegac agegagtaceg ggegettegac ggegettegac ggegettegac ggegegegegegegegegegegegegegegegegegeg			
\$\begin{align*}			
<212> DNA         <213> Homo sapiens         <400> 390         catgttectt geagcaggat aagtatgagt gteattett caacgggacg gagcggtge       60         ggttectgea cagaggeat tataaccaag aggagaacgt gegettega acggcagtag       120         gggagtacce gegegtgacg gagcgegg gegetgage gegetgage tagatactga acaccaga       180         aggacctect ggagcagag egggcegeg tggacaccta ctgcagaca aactacgggg       240         ctgtggagag ettcacagtg cagcggegag       240         <210> 391       211> 16         <211> DNA       213 Homo sapiens         <400> 391       392         <211> 17       17         <212> DNA       16         <210> 392       17         <211> 17       17         <212> DNA       17         <210> 392       17         <211> 17       17         <212> DNA       17         <210> 393       17         <210> 393       17         <210> 393       18         <211> 18       18         <212> DNA       18         <210> 393       18         <210> 393       18         <210> 394       18			
<213> Homo sapiens         <400> 390         catgtttett geageaggat aagtatgagt gteatttett caaegggaeg gageggtge ggtteetgee aeggagteetetgee aggagegggegggggggggg			
<400> 390 catgtttctt gcagcaggat aagtatgagt gtcatttctt caacgggacg gagcgggtgc ggttcctgca cagaggcatc tataaccaag aggagaacgt gcgcttcgac agcgacgtgg gggagataccg ggcggtgacg gagctgggg ggcctgacgc tgagtactgg aacagccaga aggagcctct gagagag ctgggggggggg			
catgtttctt gcagcaggat aagtatgagt gtcatttctt caacggacg gagcggtgc       60         ggttectgca cagaggcatc tataaccaag aggagaacgt gcgcttcgac agcagctgg       120         gggagtaaccg ggcgtgacg gagctggggc ggcctgacgc tgagtactgg aacagccaga       180         aaggacctcct ggagcagagg cgggccgcgg tggacaccta ctgcagaac aactacgggg       240         ctgtggagag cttcacagtg cagcggcgag       270         <210> 391       391         <211> 16       212 DNA         <213> Homo sapiens       16         <210> 391       392         <211> 17       17         <212> DNA       213 Homo sapiens         <400> 392       392         gcgttgctg gaaagat       17         <210> 393       17         <210> 393       18         <211> 18       18         <212> DNA       17         <210> 393       18         <211> 18       18         <212> DNA       18         <210> 393       18         <211> 18       18         <212> DNA       18         <210> 393       18         <211> 18       18         <210> 394       18	~210/	Tiomo sapiens	
ggttcctgca cagaggcatc tataaccaag aggagaacgt gcgcttcgac agcgacgtgg ggagataccg ggcggttgacg gagctggggc ggcctgacgc tagatactgg aacagccaga aggacctcct ggagcagagg cgggcgcggg tggacaccta ctgcagacac aactacgggg ctgtggagag cttcacagtg cagcggcgag 270  210	<400>	390	
gggagtaccg ggcggtgacg gagctggggc ggcctgacgc tgagtactgg aacagccaga aggacctcct ggagcagagg cgggccgcgg tggacaccta ctgcagacac aactacgggg 240 ctgtggagag cttcacagtg cagcggcgag 270  <210> 391 <211> 16 <211> 16 <212> DNA <213> Homo sapiens  <400> 391 ggtgcggttg ctggaa 16  <210> 392 <211> 17 <212> DNA <213> Homo sapiens  <400> 392 gcggttgctg by Box			
aggactect ggageagag eggecgeg tggacacta ctgeagacac aactaeggg 240 ctgtggagag etteacagtg cageggegag 270    <210> 391   <211> 16   <212> DNA   <213> Homo sapiens    <400> 391   ggtgeggttg ctggaa			
ctgtggagag cttcacagtg cagcggcgag 270  <210> 391 <211> 16 <212> DNA <213> Homo sapiens  <400> 391 ggtgcggttg ctggaa 16  <210> 392 <211> 17 <212> DNA <213> Homo sapiens  <400> 392 gcggttgctg gaaagat 17  <210> 392 gcggttgctg gaaagat 17  <211> Homo sapiens  <400> 392 gcggttgctg gaaagat 17  <210> 393 <211> 18 <212> DNA <213> Homo sapiens  <400> 393 ctataaccaa gaggagtc 18  <210> 393 ctataaccaa gaggagtc 18			
<pre>&lt;210&gt; 391 &lt;211&gt; 16 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 391 ggtgcggttg ctggaa</pre>			
<pre>&lt;211&gt; 16 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;400&gt; 391 ggtgcggttg ctggaa</pre>	COBOBBU	245 00000008 02 0050850505	210
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 391 ggtgcggttg ctggaa</pre>			
<213> Homo sapiens <400> 391 ggtgcggttg ctggaa 16 <210> 392 <211> 17 <212> DNA <213> Homo sapiens <400> 392 gcggttgctg gaaagat 17 <210> 393 <211> 18 <212> DNA <213> Homo sapiens <400> 393 ctataaccaa gaggagte 18		— <del>-</del>	
<pre>&lt;400&gt; 391 ggtgcggttg ctggaa</pre>			
ggtgcggttg ctggaa 16  <210> 392 <211> 17 <212> DNA <213> Homo sapiens  <400> 392 gcggttgctg gaaagat 17  <210> 393 <211> 18 <212> DNA <213> Homo sapiens  <400> 393 ctataaccaa gaggagtc 18  <210> 393 ctataaccaa gaggagtc 18	<213>	Homo sapiens	
ggtgcggttg ctggaa 16  <210> 392 <211> 17 <212> DNA <213> Homo sapiens  <400> 392 gcggttgctg gaaagat 17  <210> 393 <211> 18 <212> DNA <213> Homo sapiens  <400> 393 ctataaccaa gaggagtc 18  <210> 393 ctataaccaa gaggagtc 18	<400>	391	
<pre>&lt;211&gt; 17 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;400&gt; 392 gcggttgctg gaaagat</pre>			16
<pre>&lt;211&gt; 17 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;400&gt; 392 gcggttgctg gaaagat</pre>			
<pre>&lt;211&gt; 17 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;400&gt; 392 gcggttgctg gaaagat</pre>	<910>	302	
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 392 gcggttgctg gaaagat</pre>			
<213> Homo sapiens <400> 392 gcggttgctg gaaagat <210> 393 <211> 18 <212> DNA <213> Homo sapiens <400> 393 ctataaccaa gaggagte 18 <210> 394 <211> 15		<del>-</del> :	
17			
17	400	000	
<pre> &lt;210&gt; 393 &lt;211&gt; 18 &lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 393 ctataaccaa gaggagtc  18  &lt;210&gt; 394 &lt;211&gt; 15</pre>			17
<211> 18 <212> DNA <213> Homo sapiens <400> 393 ctataaccaa gaggagtc  18 <210> 394 <211> 15	gcggrige	ing gaaagat	17
<211> 18 <212> DNA <213> Homo sapiens <400> 393 ctataaccaa gaggagtc  18 <210> 394 <211> 15			
<212> DNA <213> Homo sapiens <400> 393 ctataaccaa gaggagtc 18 <210> 394 <211> 15		393	
<213> Homo sapiens <400> 393 ctataaccaa gaggagtc 18 <210> 394 <211> 15			
<400> 393 ctataaccaa gaggagtc 18 <210> 394 <211> 15			
ctataaccaa gaggagtc 18 <210> 394 <211> 15	<213>	riomo sapiens	
ctataaccaa gaggagtc 18 <210> 394 <211> 15	<400>	393	
<211> 15			18
<211> 15			
<211> 15	<910×	304	
		· -	

WO 2005/063985	650 / 752	PCT/JP2004/019763
<400> 394 ctggggcggc ctgat		15
<210> 395 <211> 15 <212> DNA <213> Homo sapiens		
<400> 395 gggcggcctg atgcc	,	15
<210> 396 <211> 17 <212> DNA <213> Homo sapiens		
<400> 396 cacaactacg gggttgg		17
<210> 397 <211> 19 <212> DNA <213> Homo sapiens		
<400> 397 catctataac caagaggaa		19
<210> 398 <211> 16 <212> DNA <213> Homo sapiens		
<400> 398 cgcggtggac acctat		16
<210> 399 <211> 16 <212> DNA <213> Homo sapiens		
<400> 399 gacacaacta cggggc		16
<210> 400 <211> 14 <212> DNA <213> Homo sapiens		
<400> 400 agaggcgggc cgcc		14
<210> 401 <211> 17		

WO 2005/063985	651 / 752	PCT/JP2004/019763
<212> DNA <213> Homo sapiens		
<400> 401 gaacagccag aaggaca		17
<210> 402 <211> 17 <212> DNA		
<213> Homo sapiens <400> 402 ggacatcctg gaagacg		17
<210> 403 <211> 17		
<212> DNA <213> Homo sapiens		
<400> 403 gacateetgg aagaega		17
<210> 404 <211> 16 <212> DNA <213> Homo sapiens		
<400> 404 ggccgcggtg gacaat	·	16
<210> 405 <211> 17 <212> DNA <213> Homo sapiens		
<400> 405 acaactacgg ggttgtg	•	17
<210> 406 <211> 17 <212> DNA <213> Homo sapiens		
<400> 406 cttcgacagc gacgtga		17
<210> 407 <211> 15 <212> DNA <213> Homo sapiens		
<400> 407 cctcctggag caggc		15

17

<210> 414 <211> 17 <212> DNA <213> Homo sapiens

cctggacaga tacttcc

WO 2005/063985	653 / 752	PCT/JP2004/019763
<400> 414 ccataaccag gaggaga		17
<210> 415 <211> 18 <212> DNA <213> Homo sapiens		
<400> 415 ccataaccag gaggagaa	,	18
<210> 416 <211> 16 <212> DNA <213> Homo sapiens		
<400> 416 gcgacgtggg ggagtt		16
<210> 417 <211> 15 <212> DNA <213> Homo sapiens		
<400> 417 gcagaagcgg ggccg		15
<210> 418 <211> 15 <212> DNA <213> Homo sapiens		
<400> 418 gggccgggtg gacaa		15
<210> 419 <211> 16 <212> DNA <213> Homo sapiens	•	
<400> 419 gggccgggtg gacaat		16
<210> 420 <211> 13 <212> DNA <213> Homo sapiens		
<400> 420 cacgtttctt gga		13
<210> 421 <211> 16	•	·

WO 2005	5/063985	654 / 752	PCT/JP2004/019763
<212> <213>	DNA Homo sapiens		
<400> ggtgcgg	421 ttc ctggag		16
<210><211><211><212><213>	17	· ·	
<400> cctggag	422 aga tacttcc		17
<210><211><211><212><213>	19		
<400> cagatao	423 ttc cataaccag		19
<210><211><211><212><213>	17		
<400> ttggtga	424 gag cttcacg		17
<210> <211> <212> <213>	16		
<400> ggtgcgg	425 tac ctggac		16
<210> <211> <212> <213>	15		·
<400> ggggcg	426 geet gatga		15
<210><211><211><212><213>	15		
<400>	427 ectg atgag		15

<210> <211> <212> <213>	18				
<400>	428 ttc cataaccg				18
cagavac	vic caraacog				10
-010-	400			<b>,</b>	
<210> <211>			•		
<211> <212>				•	
	Homo sapiens				
1210	Homo sapiens				
<400>	429				
ctggggc	ggc ctgc				14
<210>	, . .420				
<210> <211>					
<211>					
	Homo sapiens				
	•				
<400>					
agcagaa	gcg gggcc				15
<210>	431			•	
<211>					
<212>					
<213>	Homo sapiens				
14005	401				
<400>	431				15
gcagaag	cgg ggcca	•			10
<210>	432				i.
<211>	16				
<212>	DNA				
<213>	Homo sapiens				
<400>	432				
	ggt ggacaa				16
5000					
<210>					
<211> <212>	15 DNIA				
	Homo sapiens				
\210>	Tiomo sapiens				
<40.0>	433	•			
ctggggc	ggc ctagc				15
~910 <u>&gt;</u>	494				
<210> <211>	434 16				
<211>	DNA				•
	Homo sapiens				
	<b>-</b>				

WO 2005/063985	656 / 752	PCT/JP2004/019763
<400> 434 ggcctgatgc cgagtc	· ·	16
<210> 435 <211> 16 <212> DNA <213> Homo sapiens		
<400> 435 gacgtggggg agttct		16
<210> 436 <211> 19 <212> DNA <213> Homo sapiens		
<400> 436 gtttcttgga gtactctac		19
<210> 437 <211> 16 <212> DNA <213> Homo sapiens		
<400> 437 ggtgcggttc ctggac		16
<210> 438 <211> 15 <212> DNA <213> Homo sapiens		
<400> 438 gtaccgggcg gtgag		15
<210> 439 <211> 16 <212> DNA <213> Homo sapiens		
<400> 439 gggccaggtg gacaat		16
<210> 440 <211> 16 <212> DNA <213> Homo sapiens	·	
<400> 440 ttcgacagcg acgtgc	· .	16
<210> 441 <211> 18		

WO 2005	5/063985	657 / 752	PCT/JP2004/019763
<212> <213>	DNA Homo sapiens		
<400> ccataac	441 cag gaggagtt		18
<210><211><211><211><212><213>	17	$ au + \chi$	
<400> cctggac	442 aga tacttcg		17
<210><211><211><212><213>	18	•	
<400> ccataac	443 cag gaggagta		18
<210> <211> <212> <213>	16		
<400> atggtgt	444 gtc tgaagt		16
<210><211><211><212><213>	20		
<400> gatactt	445 cta tcaccaagaa		20
<210><211><211><212><213>	18		
<400> tcttgga	446 gca ggttaaac		18
<210><211><211><212><213>	18		
<400>	447		

ctatcaccaa gaggagta

18

WO 2005/063985	658 / 752	PCT/JP2004/019763
<210> 448 <211> 15 <212> DNA <213> Homo sapiens		
<400> 448 gcagaggcgg gccga	·	15
<210> 449 <211> 15 <212> DNA <213> Homo sapiens	· · · · · · · · · · · · · · · · · · ·	
<400> 449 ggggggcctg acgct		15
<210> 450 <211> 18 <212> DNA <213> Homo sapiens		
<400> 450 cttggagcag gttaaaca		18
<210> 451 <211> 19 <212> DNA <213> Homo sapiens		
<400> 451 ctggacagat acttctatc		19
<210> 452 <211> 15 <212> DNA <213> Homo sapiens		
<400> 452 gctggggcgg cctag		15
<210> 453 <211> 16 <212> DNA <213> Homo sapiens		
<400> 453 agaggagtac gtgcgg		16
<210> 454 <211> 17 <212> DNA <213> Homo sapiens		
<400> 454	•	

WO 200:	5/063985	659 / 752	PCT/JP2004/019763
gcttcac	agt gcagcga		17
<210><211><211><212><213>	16		
<400> cctcctgs	455 gag cagaga	·	16
<210><211><211><212><213>	19		
<400> tttcttgg	456 ag caggttaaa		19
<210><211><211><212><213>	15		
	457 gegg geeet		15
<210> <211> <212> <213>	17		
<400> gaacag	458 ccag aaggact		17
<210> <211> <212> <213>			
	459 cct ggaagac		17
<210> <211> <212> <213>	460 15 DNA Homo sapiens		
<400> ggcggco	460 etga tgece		15
<210> <211> <212>	461 16 DNA		

WO 2005	5/063985	660 / 752	PCT/JP2004/019763
<213>	Homo sapiens		
<400> cggggtt	461 gtg gagaga		16
<210> <211> <212> <213>	15	· ·	
<400> ggacctc	462 ctg gagcg		15
<210> <211> <212> <213>	16		
<400> ctggggc	463 ggc ctgata		16
<210> <211> <212> <213>	16		
<400> agtaccg	.464 ggc ggtgat		16
<210><211><211><212><213>	15		
<400> ggggga	465 gtac cgggt		15
<210><211><211><212><213>	14		
<400> gcagag	466 gegg geec		14
<210><211><211><212><213>	15		
<400> gcagag	467 gegg gecet		15

WO 2005/063985	661 / 752	PCT/JP2004/019763
<210> 468 <211> 16 <212> DNA <213> Homo sa	piens	
<400> 468 teetggagga gaggga	a	16
<210> 469 <211> 17 <212> DNA <213> Homo sa	piens	
<400> 469 caagaggagt acgtg	gca	17
<210> 470 <211> 18 <212> DNA <213> Homo sa	piens	
<400> 470 cttggagcag gttaaa	acc	18
<210> 471 <211> 16 <212> DNA <213> Homo sa	piens	
<400> 471 gacctcctgg aagac	g	16
<210> 472 <211> 17 <212> DNA <213> Homo sa	upiens	
<400> 472 gaceteetgg aagac	ga	17
<210> 473 <211> 17 <212> DNA <213> Homo sa	apiens	
<400> 473 gacateetgg ageag	;aa	17
<210> 474 <211> 15 <212> DNA <213> Homo sa	apiens	

WO 2005	5/063985	662 / 752	PCT/JP2004/019763
agcgacgtgg gggac			15
<210> <211> <212> <213>	15		
<400> ggggcgg	475 geet gatgg	· •	15
<210> <211> <212> <213>	18		
<400> tctatcac	476 cca agaggaga		18
<210><211><211><212><213>	18		
<400> ctatcace	477 caa gaggagaa		18
<210><211><211><212><213>	15		·
<400> ggctggg	478 gac accca		15
<210> <211> <212> <213>	14		
<400> ggacag	479 gcgg ggcc		14
<210><211><211><212><213>	16 DNA		
	480 ggac accgtg		16
<210> <211> <212>	481 17 DNA		

WO 2005	5/063985	663 / 752	PCT/JP2004/019763
<213>	Homo sapiens		
<400> tcctgtgg	481 gca gggtaaa		17
<210><211><211><212><213>	16	· · · · · · · · · · · · · · · · · · ·	
<400> ggcggtg	482 gacg gageta		16
<210><211><211><212><213>	15		
<400> gcctgtc	483 gcc gagtc	•	15
<210><211><211><212><213>	18		
<400> gtgcagt	484 tcc tggaaagt	•	18
<210><211><211><212><213>	16		
<400> agtcctg	485 gaa cagccg		16
<210><211><211><212><213>	14		
<400> ggcggcc	486 etgc tgcg		14
<210><211><211><212><213>	16		
<400> gtgacgg	487 gage tagggt		16

WO 2005/063985	664 / 752	PCT/JP2004/019763
<210> 488 <211> 17 <212> DNA <213> Homo sapiens		
<400> 488 ctctacgggt gagtgtt	·	17
<210> 489 <211> 18 <212> DNA <213> Homo sapiens		
<400> 489 cggttcctgg acagatat		18
<210> 490 <211> 16 <212> DNA <213> Homo sapiens		
<400> 490 gctcctgcat ggcagt		16
<210> 491 <211> 16 <212> DNA <213> Homo sapiens		
<400> 491 gtaccgggcg gtgaca		16
<210> 492 <211> 17 <212> DNA <213> Homo sapiens		
<400> 492 cacaactacg gggttgt		17
<210> 493 <211> 18 <212> DNA <213> Homo sapiens		
<400> 493 gttgttgaga gcttcacg		18
<210> 494 <211> 17 <212> DNA <213> Homo sapiens		
11005 101	•	•

WO 2005/063985	665 / 752	PCT/JP2004/019763
ttgtggagag ettcacg		17
<210> 495 <211> 15		
<212> DNA <213> Homo sapiens	s	
<400> 495 gctggggggg cctgt	N.	15
<210> 496 <211> 15		
<212> DNA <213> Homo sapiens	s	
<400> 496 ggeetgetge ggage		15
<210> 497		
<211> 19		
<212> DNA <213> Homo sapiens		
110mo sapiens	5	
<400> 497		19
gtttcttgga gtactctag		19
<210> 498 <211> 15		
<211> 15 <212> DNA		
<213> Homo sapiens	s	
<400> 498		•
ggcctgatgc ggagc		15
	•	
<210> 499		
<211> 18 <212> DNA		
<213> Homo sapiena	s .	
<400> 499		
tctataacca agaggagg		18
<210> 500		
<211> 17 <212> DNA		
<213> Homo sapien	s	
<400> 500		
aggacatect ggaagac		17
<210> 501		
<211> 15		
<212> DNA		

WO 2005	5/063985	666 / 752	PCT/JP2004/019763
<213>	Homo sapiens		
<400>	501		
gctgggg	egg cctat		15
		•	•
<210>		•	
<211> <212>			
	Homo sapiens	V	
<400s	T00		•
<400>	tac tetaegte	·	18
0005505	ad totalogic		
<210>	503		
<211>			
<212>			
<213>	Homo sapiens	•	
<400>			
gtttcttg	ga gtactctat		19
<210> <211>			
<211>			
	Homo sapiens		•
<400>	504		
	ggg gctgtg		16
<210>			
<211>			
<212> <213>	Homo sapiens		
			•
<400>	gag cttcacg		17
0.6.88	9-8		
<210>	506		
<211>			
<212>			
<213>	Homo sapiens		
<400>			15
gagette	aca gtgcaga		17
-0.4.O	F05		
<210> <211>			
<211>			
	Homo sapiens		
<400>	507		
	egga ggcgt		15

WO 2005/063985	667 / 752	PCT/JP2004/019763
<210> 508 <211> 17 <212> DNA <213> Homo sapie	ens	
<400> 508 gttgctggaa agacgcg		17
<210> 509 <211> 15 <212> DNA		
<213> Homo sapie	ens	
<400> 509 ctggagegga ggege		15
<210> 510 <211> 17 <212> DNA <213> Homo sapie	ens	
<400> 510 gaaggacttc ctggaag		17
<210> 511 <211> 16 <212> DNA <213> Homo sapie	ens	
<400> 511 cctggaagac aggcgc		16
<210> 512 <211> 19 <212> DNA <213> Homo sapie	ens	
<400> 512 tgagtgtcat ttcttcaac		19
<210> 513 <211> 17 <212> DNA <213> Homo sapic	ens	
<400> 513 gacttcctgg aagacga		17
<210> 514 <211> 17 <212> DNA <213> Homo sapie	ens	

WO 2005/063985	668 / 752	PCT/JP2004/019763
cttggagtac tctacgg		17
<210> 515		
<211> 16	•	
<212> DNA		
<213> Homo sapiens		
<400> 515	. ,	
ggacctcctg gaagac	,	16
<210> 516		
<211> 17		
<212> DNA		
<213> Homo sapiens		
<400> 516		
ggactteetg gaagaeg		17
<210> 517		
<211> 19		
<212> DNA		
<213> Homo sapiens		
<400> 517		
<400> 517 tctataacca agaggagtt		19
votavaaooa agaggagvv		20
2010× 510		
<210> 518 <211> 19		
<211> 19 <212> DNA		
<213> Homo sapiens		
<400> 518		10
cagatacttc tataaccag		19
<010× 510		
<210> 519 <211> 18		
<211> 18 <212> DNA		
<213> Homo sapiens		
<400> 519		
ctataaccag gaggagtt	,	18
<210> 520		
<211> 18		
<212> DNA		
<213> Homo sapiens		
<400> 520		
ataaccaaga ggaggact		18
<210> 521		
<211> 14		
<212> DNA		

WO 2005/063985	669 / 752	PCT/JP2004/019763
<213> Homo sapiens		
<400> 521 cggaggcggg ccga		14
<210> 522 <211> 17 <212> DNA <213> Homo sapiens	·	
<400> 522 ccgaggtgga cacctat		17
<210> 523 <211> 15 <212> DNA <213> Homo sapiens		
<400> 523 aagacaggcg ggccc		15
<210> 524 <211> 17 <212> DNA <213> Homo sapiens		•
<400> 524 ttggagtact ctacgtc		17
<210> 525 <211> 18 <212> DNA <213> Homo sapiens		
<400> 525 gagtacteta egtetgag		18
<210> 526 <211> 18 <212> DNA <213> Homo sapiens		
<400> 526 cagaaggact teetggaa		18
<210> 527 <211> 15 <212> DNA <213> Homo sapiens		
<400> 527 ggccgcggtg gacaa		15

WO 2005	5/063985	670 / 752	PCT/JP2004/019763
<210> <211> <212> <213>	19		
<400> ttctataa	528 acc aagaggaga		19
<210> <211> <212> <213>	19	V.	
<400> tctataa	529 cca agaggagaa		19
<210> <211> <212> <213>	16		
<400> cacgttto	530 ett ggaget		16
<210> <211> <212> <213>	16		
<400>	531 atg aggagc		16
<210> <211> <212> <213>	532 15 DNA Homo sapiens		
<400> agacag	532 gegg geegt		15
<210> <211> <212> <213>	533 16 DNA Homo sapiens		
<400> gcggcct	533 gat gaggac		16
<210> <211> <212> <213>	534 15 DNA Homo sapiens		
<400>	534		

WO 2005/06	3985	671 / 752	PCT/JP2004/019763
geggeetgat	gaggg		15
<210> 53 <211> 15 <212> D1 <213> Ho			•
<400> 53 gttccgggcg			15
<210> 53 <211> 17 <212> D1 <213> Ho			
<400> 53 gctcctgcat			17
<210> 53 <211> 16 <212> D3 <213> He			
<400> 53 ttggctgggg			16
<210> 53 <211> 16 <212> D3 <213> Ho	<b>;</b>		
<400> 53			16
<210> 53 <211> 17 <212> D3 <213> He	,		
<400> 53 ccataaccag			17
<210> 54 <211> 17 <212> D			
<213> He <400> 54	omo sapiens 10		
cagaaggac			17
<210> 54 <211> 15 <212> D			

WO 2005	5/063985	672 / 752		PCT/JP2004/019763
<213>	Homo sapiens			
<400> gagcggg	541 gtgc ggttc			15
<210> <211> <212> <213>	16		. ,	·
<400> ggaaga	542 cgag cgggct		ŧ	16
<210><211><211><212><212><213>	16			
<400> cctggaa	543 gac gagege			16
<210><211><211><212><213>	18			
<400> ggacate	544 octg gaagacaa			18
<210> <211> <212> <213>	18			
<400> acgtttct	545 ctg gagtactc			18
<210><211><211><212><213>	18 DNA			
<400> ggttccta	546 gga cagatact			18
<210><211><211><212><213>	16 DNA			
<400> acatcct	547 gga gcaggc	·		16

WO 2005/0	063985	673 / 752	PCT/JP2004/019763
<210> <211> <211> <212> <213> <	17		
<400> {cacaacta	548 cg gggttga		17
<210> {<211> (<211> (<212> )	19	,	
<400> { gagatact	549 tc cataaccag		19
<210> (211> (211> (212> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213) (213> (213> (213> (213> (213> (213> (213> (213) (213> (213> (213> (213) (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213> (213>	17		
<400> ctgcagac	550 ac aactacc		17
<210> <211> <212> <212> <213> <	17		
<400> taaccagg	551 ag gagaacc		17
<211> <212> :	552 16 DNA Homo sapiens		
<400> acgtgggg			16
<211> <212>	553 15 DNA Homo sapiens		
<400> ctggggcg	553 gc ctgtc		15
<211> <212>	554 15 DNA Homo sapiens		

WO 2005/063985	674 / 752	PCT/JP2004/019763
gggagttccg ggcgt		15
<210> 555 <211> 18 <212> DNA <213> Homo sapiens		
<400> 555 cacgtttett ggagtaet	S.	18
<210> 556 <211> 18 <212> DNA <213> Homo sapiens		
<400> 556 tctacgtctg agtgtcaa		18
<210> 557 <211> 15 <212> DNA <213> Homo sapiens	·	
<400> 557 gggcggcctg atgct		15
<210> 558 <211> 18 <212> DNA <213> Homo sapiens		
<400> 558 tttcttggag tactctac		18
<210> 559 <211> 16 <212> DNA <213> Homo sapiens		
<400> 559 gacatcctgg agcagg		16
<210> 560 <211> 15 <212> DNA <213> Homo sapiens		
<400> 560 gacggagcgg gtgca		15
<210> 561 <211> 16 <212> DNA		

WO 2005	5/063985	675 / 752		PCT/JP2004/019763
<213>	Homo sapiens	•	,	
<400> ggccgag	561 gtg gacaat			16
<210><211><211><212><213>	17		e v	
<400> ttggagt	562 acc ctacgtc			17
<210><211><211><212><212><213>	17			
<400> taaccag	563 gag gagttee			17
<210><211><211><212><213>	15			
<400>	564 aggt ggacg			15
<210> <211> <212> <213>	17			
<400> ctccca	565 etg getttgt			17
<210> <211> <212> <213>	566 17 DNA Homo sapiens			
<400> gcagaca	566 acaa ctacgga			17
<210> <211> <212> <213>	567 18 DNA Homo sapiens			
<400> cacaact	567 acg gagttgtg			18

WO 2005/063985		676 / 752	PCT/JP2004/019763
<210> 568 <211> 16 <212> DNA <213> Homo s	sapiens		
<400> 568 gtggcagcct aaga	gg		16
<210> 569 <211> 20 <212> DNA <213> Homos	sapiens	V	
<400> 569 tggacagata cttc	tataat		20
<210> 570 <211> 16 <212> DNA <213> Homo s	sapiens		
<400> 570 cggttcctgg acag	ac		16
<210> 571 <211> 16 <212> DNA <213> Homo s	sapiens		
<400> 571 acttcctgga gcag	gc		16
<210> 572 <211> 15 <212> DNA <213> Homos	sapiens		
<400> 572 ggagttccgg gcgg	çc		15
<210> 573 <211> 17 <212> DNA <213> Homo	sapiens		
<400> 573 ctggaacagc cag	aaga		17
<210> 574 <211> 16 <212> DNA <213> Homo	sapiens		
<400> 574 acgtggggga gtte	cca		16

WO 2005/06	3985	677 /	752		PCT/JP2004/019763
<210> 57 <211> 19 2212> D3 2213> H6					· ·
<400> 57	75 c caggggaca			•	19
<210> 57 <211> 16 <212> D3 <213> H6	<b>;</b>			V	
<400> 57				,	16
<210> 57 <211> 15 <212> D <213> Helical Action (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2	<b>i</b>				
<400> 57					15
<210> 57 <211> 18 2212> D2 2213> He	3				
<400> 57					18
<210> 57 <211> 17 <212> Di <213> H	7		·		
<400> 57	79				17
<210> 58 <211> 16 <212> D <213> H	3				
<400> 58					16
<210> 58 <211> 18 <212> D <213> H	3				

WO 2005	/063985	678 / 752	PCT/JP2004/019763
cacgttte	tt ggagctgt		18
<210> <211> <212> <213>	17		
<400> cgtttctt	582 gg agctgtg	,	17
<210><211><211><212><213>	16		
<400> ggtgcgg	583 tac ctggag		16
<210><211><211><212><213>	16		
<400> gtttctcg	584 ga getgeg		16
<210> <211> <212> <213>	16		
<400> cgggtgc	585 ggt acctga		16
<210> <211> <212> <213>	16		
<400> accagga	586 agga gtacgc		16
<210><211><211><212><213>			
<400> ccaggas	587 ggag ttcctga		17
<210> <211> <212>	588 12 DNA		

WO 2005	5/063985	679 / 752		PCT/JP2004/019763
<213>	Homo sapiens			
<400> cacgttto				12
•				
<210><211>				
<212>	DNA		,	
<213>	Homo sapiens			
<400>				
cggttcct	gg agagac			16
<210>	500			
<211>				
<212>				
	Homo sapiens			
<400>	590 att actgcagg			18
guggaca	att actgeagg			10
<210>	591			
<211>	15			
<212> <213>	DNA Homo sapiens			
<400>	ectg atgcg			15
888.88				
<210>		,		
<211> <212>				•
<212>	Homo sapiens			
<400>	592			
	tcc ataaccag			18
<210> <211>	593 16			
<211><212>				
<213>	Homo sapiens			
<400>	593			
accagga	agga gaacgc			16
<b>∠010</b> ≤	504			
<210> <211>	594 14			
<212>	DNA			
<213>	Homo sapiens			
<400>				14
ggagcg	ggtg cggc			14

WO 2005	//063985	680 / 752	PCT/JP2004/019763
<210><211><211><212><213>	17		
<400>	595		
cacaact	acg gggttgc	,	17
<210><211><211><212><213>	17.		<b>,</b>
<400>	596		•
	caa ctacggc		17
<210> <211> <212> <213>	18		
<400> gctgaca	597 gtg acattgac		18
<210> <211> <212> <213>	14		
<400>	598 agg tggg		14
<210> <211> <212> <213>			·
<400> agtgtga	599 gtg tcatttcc		18
<210> <211> <212> <213>	DNA		
<400>			10
ggagcga	agtg tggaac		16
<210> <211> <212> <213>	17 DNA		

WO 200	5/063985	 681 / 752		PCT/JP2004/019763
ggacaco	tac tgcagat			17
<210> <211> <212> <213>	17		·	
	602 caa cagtgat			17
<210> <211> <212> <213>	16			
<400> gggccga	603 aggt ggacaa			16
<210><211><211><212><213>	18			
<400> tggacaa	604 acta etgeagat			18
<210> <211> <212> <213>	16			
	605 egag tgtgga			16
<210> <211> <212> <213>	18		·	
<400>	606 tac atggcaaa			18
<210><211><211><212><213>	12			
<400> cacgttt	607			12
<210> <211> <212>	608 19 DNA	,		,

WO 2005/063985	682 / 752	PCT/JP2004/019763
<213> Homo sapi	ens	
<400> 608 atctataacc aagagga	ga .	19
<210> 609 <211> 16 <212> DNA <213> Homo sapi	ens	
<400> 609 cggttcctgc acagag		16
<210> 610 <211> 17 <212> DNA <213> Homo sapi	ens	
<400> 610 gacttcctgg aagacac		17
<210> 611 <211> 16 <212> DNA <213> Homo sapi	ens	
<400> 611 cctggaagac acgcgc		16
<210> 612 <211> 17 <212> DNA <213> Homo sapi	ens	
<400> 612 gaaggacatc ctggaag		17
<210> 613 <211> 18 <212> DNA <213> Homo sapi	ens	
<400> 613 agaaggactt cctggaa	a	18
<210> 614 <211> 15 <212> DNA <213> Homo sapi	ens	·
<400> 614 gcctgacgcc gagtc		15

WO 2005	5/063985	683 / 752	PCT/JP2004/019763
<210><211><211><212><213>	16		·
<400> aggactt	615 cct ggagcg		16
<210> <211> <212> <213>	16	3	·
<400> cgaggtg	616 gac accgtg		16
<210> <211> <212> <213>	17		
<400> ctcctgg	617 gag gttccta		17
<210><211><211><212><213>	18		
<400> gttgctgg	618 gaa agatgcat		18
<210> <211> <212> <213>	19	·	
<400> ctggaaa	619 agat gcatctata		19
<210><211><211><212><213>	15		
<400> gaggag	620 tccg tgcgc		15
<210><211><211><212><213>	15		
<400>	621		

WO 2005/063985	684 / 752	PCT/JP2004/019763
cggcctgatg ccgag		15
<210> 622 <211> 17 <212> DNA <213> Homo sapiens		
<400> 622 cctgatgccg agtactg	. ,	17
<210> 623 <211> 16 <212> DNA <213> Homo sapiens		
<400> 623 cggggttggt gagagc		16
<210> 624 <211> 17 <212> DNA <213> Homo sapiens		
<400> 624 caagaggaat ccgtgcg		17
<210> 625 <211> 18 <212> DNA <213> Homo sapiens	·	
<400> 625 ggacacctat tgcagaca		18
<210> 626 <211> 16 <212> DNA <213> Homo sapiens		
<400> 626 ctacggggct gtggag		16
<210> 627 <211> 14 <212> DNA <213> Homo sapiens		
<400> 627 gggccgccgt ggac		• 14
<210> 628 <211> 18 <212> DNA		

WO 2005/063985	685 / 752	PCT/JP2004/019763
<213> Homo sapiens		
<400> 628 cagaaggaca tcctggaa		18
<210> 629 <211> 15 <212> DNA <213> Homo sapiens	ş	
<400> 629 ggaagacgag cgggc		15
<210> 630 <211> 15 <212> DNA <213> Homo sapiens		
<400> 630 gaagacgagc gggcc		15
<210> 631 <211> 18 <212> DNA <213> Homo sapiens		
<400> 631 ggtggacaat tactgcag		18
<210> 632 <211> 16 <212> DNA <213> Homo sapiens		
<400> 632 ggggttgtgg agagct		16
<210> 633 <211> 16 <212> DNA <213> Homo sapiens		
<400> 633 cgacgtgagg gagtac		16
<210> 634 <211> 14 <212> DNA <213> Homo sapiens		
<400> 634 gagcaggcgc gggc		14

WO 2005	5/063985	686 / 752	PCT/JP2004/019763
<210> <211> <212> <213>	18		
<400> ttcttgtg	635 gg agcttaag		18
<210><211><211><212><213>	16		
<400>			16
<210><211><211><212><212>	14		
<400>		•	14
<210><211><211><212><213>	15		
<400>		•~.	15
<210><211><211><212><213>			
<400>	639		8
<210><211><211><212><213>	16		
<400> ggtgcgg	640 rtac ctggac		16
<210> <211> <212> <213>	17		
-400-	0.41		

WO 2005/063985	687 / 752	PCT/JP2004/019763
ggtggacaac tactgca		<b>17</b>
<210> 642 <211> 14 <212> DNA <213> Homo sapiens		
<400> 642 cggggccggg tgga		14
<210> 643 <211> 18 <212> DNA <213> Homo sapiens		
<400> 643 gttcctggag agatactt		18
<210> 644 <211> 19 <212> DNA <213> Homo sapiens		
<400> 644 agatacttcc ataaccagg		19
<210> 645 <211> 16 <212> DNA <213> Homo sapiens		
<400> 645 ggaggagaac gtgcgc		16
<210> 646 <211> 16 <212> DNA <213> Homo sapiens		
<400> 646 ggaggagaac gtgcgc		16
<210> 647 <211> 17 <212> DNA <213> Homo sapiens		
<400> 647 cataaccagg aggagtc		17
<210> 648 <211> 15 <212> DNA		

WO 2005	//063985	688 / 752		PCT/JP2004/019763
<213>	Homo sapiens			
<400> ggggagt	648 tcc gggcg			15
<210><211><211><212><213>	16			
<400> agcttcac	649 egg tgeage			16
<210> <211> <212> <213>	18			
<400> gtacctg	650 gac agatactt			18
<210> <211> <212> <213>	17			
<400> gcctgat	651 gag gagtact			17
	652 17 DNA Homo sapiens			
<400> cctgatg	652 agg agtactg			17
<210> <211> <212> <213>	16		•	
<400> ccataac	653 cgg gaggag			16
<210><211><211><212><213>	15			
<400> cggcctg	654 ctg cggag			15

WO 2005	5/063985	689 / 752	PCT/JP2004/019763
<210> <211> <212> <213>	15	·	
<400> gcggggc	655 cag gtgga		15
<212>	15		
<400>	656 agg tggac		15
<210> <211> <212> <213>	15	•	
<400> cggcctag	657 geg eegag		15
<212>	15		
<400> cggccta <sub>i</sub>	658 gcg ccgag		15
	659 16 DNA Homo sapiens		
<400>			16
<210><211><211><212><213>	660 16 DNA Homo sapiens	•	
	660 tgg gcggtg		16
	661 18 DNA Homo sapiens		

WO 2005/063985	690 / 752	PCT/JP2004/019763
agtactctac gtctgagt		18
<210> 662 <211> 18 <212> DNA <213> Homo sapiens	·	
<400> 662 gttcctggac agatactt	V.	18
<210> 663 <211> 15 <212> DNA <213> Homo sapiens		·
<400> 663 gcggtgaggg agctg		15
<210> 664 <211> 16 <212> DNA <213> Homo sapiens		
<400> 664 cgacgtgcgg gagttc		16
<210> 665 <211> 17 <212> DNA <213> Homo sapiens		
<400> 665 agaaggacat cetggag		17
<210> 666 <211> 16 <212> DNA <213> Homo sapiens		
<400> 666 ggaggagttc gtgcgc		16
<210> 667 <211> 19 <212> DNA <213> Homo sapiens		
<400> 667 agatacttcg ataaccagg		19
<210> 668 <211> 18 <212> DNA		

WO 2005/063985	691 / 752	PCT/JP2004/019763
<213> Homo sapiens		
<400> 668 ccataaccag gaggagta		18
<210> 669 <211> 16 <212> DNA <213> Homo sapiens		
<400> 669 ggaggagtac gtgcgc		16
<210> 670 <211> 17 <212> DNA <213> Homo sapiens		
<400> 670 gtctgaagtt ccctgga		17
<210> 671 <211> 18 <212> DNA <213> Homo sapiens		
<400> 671 tcaccaagaa gagtacgt		18
<210> 672 <211> 19 <212> DNA <213> Homo sapiens		
<400> 672 caggttaaac atgagtgtc		19
<210> 673 <211> 15 <212> DNA <213> Homo sapiens		
<400> 673 cgggccgagg tggac		15
<210> 674 <211> 17 <212> DNA <213> Homo sapiens		
<400> 674 cctgacgctg agtactg		17

WO 2005/063985	692 / 752	PCT/JP2004/019763
<210> 675 <211> 19 <212> DNA <213> Homo sapiens		•
<400> 675 aggttaaaca tgagtgtca		19
<210> 676 <211> 19 <212> DNA <213> Homo sapiens		
<400> 676 tacttctatc accaagagg		19
<210> 677 <211> 17 <212> DNA <213> Homo sapiens		
<400> 677 tacgtgcggt tcgacag		17
<210> 678 <211> 15 <212> DNA <213> Homo sapiens		
<400> 678 gagcagagac gggcc	·	15
<210> 679 <211> 18 <212> DNA <213> Homo sapiens		
<400> 679 gcaggttaaa catgagtg		18
<210> 680 <211> 15 <212> DNA <213> Homo sapiens		
<400> 680 cgggccctgg tggac		15
<210> 681 <211> 18 <212> DNA <213> Homo sapiens		
<400> 681		

WO 2005	5/063985	693 / 752	PCT/JP2004/019763
cagaagg	gact teetggaa		18
<210> <211> <212> <213>	16		
<400> ctggaag	682 aca ggcggg		16
<210><211><211><212><213>	17		· ·
<400> ctgatgc	683 cca gtactgg		17
<210><211><211><212><213>	18		
<400> tgtggag	684 aga ttcacagt		18
<210> <211> <212> <213>	15		
<400> ctggagc	685 gga ggcgg		15
<210> <211> <212> <213>	15		
<400> gcgggco	686 ctg gtgga		15
<210> <211> <212> <213>	17		
<400> ggcctga	687 tac cgagtac		17
<210> <211> <212>	688 16 DNA		

WO 2005	5/063985	694 / 752	PCT/JP2004/019763
<213>	Homo sapiens		
<400> ggcggtg	688 atg gagetg		16
<210> <211> <212> <213>	16		· \$
<400> gtaccgg	689 gtg gtgacg		16
<210><211><211><212><213>	15		
<400> cagaggo	690 cagg ccgcg		15
<210><211><211><212><213>	17		
<400> gtacgtg	691 cac ttcgaca		17
<210><211><211><212><213>	18		
<400> caggtta	692 aac ctgagtgt		18
<210> <211> <212> <213>	18		
<400> aggttaa	693 acc tgagtgtc		18
<210> <211> <212> <213>	15		
<400> gtggggg	694 gact accgg		15

WO 2005/063985	695 / 752	PCT/JP2004/0197
<210> 695 <211> 16		
<212> DNA		
<213> Homo sapiens	•	
<400> 695	•	
gcctgatggc gagtac		16
<210> 696	,	
<211> 16		
<212> DNA		
<213> Homo sapiens		
<400> 696		
agaggagaac gtgcgc	·	16
<210> 697		
<211> 16	·	
<212> DNA		
<213> Homo sapiens		
<400> 697	•	
agaggagaac gtgcgc		16
<210> 698		
<211> 7		
<212> DNA		
<213> Homo sapiens		
<400> 698		
acccaac		7
	•	•
<210> 699		
<211> 16		•
<212> DNA		
<213> Homo sapiens		
<400> 699		
gacaccgtgt gcagac		16
<210> 700		
<211> 19		
<212> DNA		
<213> Homo sapiens		
<400> 700		
gcagggtaaa tataagtgt		19
<210> 701		
<211> 15		
<212> DNA		
<213> Homo sapiens		
400 #01		

WO 200	5/063985	696 / 752		PCT/JP2004/019763
acggago	etag ggcgg			15
<210> <211> <212> <213>	16			
<400> cgccgag	702 tcc tggaac			16
<210><211><211><212><213>	18			
<400> cctggaa	703 agt ctcttcta			18
<210><211><211><212><213>	16			
<400> gaacago	704 ccgg aaggac			16
<210> <211> <212> <213>	16 DNA Homo sapiens		c	
	egg agtact			16
<210><211><211><212><213>	16			
<400> gctaggg	706 gtġg cctgtc			16
<210><211><211><212><213>				•
<400> ggtgag	707 tgtt atttettea			19
	708 20<212> DNA Homo sapiens			

		097/102	-	01/01/2001/01
<400> 70	08 a tttctataac			20
<211> 16 <212> D			• .	
<400> 70 gtgtctgagg				16
<210> 7: <211> 16 <212> D <213> H	3			
<400> 73 gcggtgaca				16
<210> 73 <211> 16 <212> D <213> H	3		·	
<400> 7				16
<400> 7	12 ccgag			15
<210> 7 <211> 16 <212> D <213> H	6		,	
<400> 7 tgcggagca	13 c tggaac			16
<210> 7 <211> 1' <212> D <213> H	7			
<400> 7 gtactctacg				17
<210> 7<211> 1	15 5			

697 / 752

PCT/JP2004/019763

WO 2005/063985

WO 2005/	063985	698 / 752	PCT/JP2004/019763
<212> <213>	DNA Homo sapiens		
<400>	715		
cggcctgc	tg ccgag		. 15
0.10	<b>510</b>		
<210> <211>			
<212>	DNA		ţ.
<213>	Homo sapiens		
<400>			15
gtactcta	gg ggtgagt		17
<210>	717		
<211>	16		
<212>			
<213>	Homo sapiens		
<400>			16
agaggag	gac gtgcgc		10
<210>	718		
<211>	15		
<212>	DNA Homo sapiens		
<400>			15
CESCULAT	og cogug		10
<210>	719		
<211>			
<212> <213>	Homo sapiens		
<400>	-		
	ot gagtgtc		17
<210>			
<211> <212>			
	Homo sapiens		
<400>	720		
	at gggtgagt		·18
<210>			
<211> <212>			
	Homo sapiens		
<400>	721		
	tgg agagc		15

	722 17 DNA Homo sapiens		·
<400> gtgcggta	722 atc tgcacag		17
		1 9	
<210> <211>	723 14		
	DNA		
	Homo sapiens		
<400>	723		
ggaggcg	tgc cgcg		14
<210>			
<211>	18		
<212> <213>	DNA		
<213>	Homo sapiens		
<400>			
gaaagao	gcg tccataac		18
<210>			
<211> <212>	14 DNA		
<213>	Homo sapiens		
<400>	725		
	ege egeg		14
00 00 0			
<210>	726		
<211>	16	·	
<212>	DNA		
<213>	Homo sapiens		
<400>			. 10
cctggaa	gac aggcgc		16
40105	<b>505</b>	•	
<210> <211>	727 16		
<211>			
	Homo sapiens		
<400>	727		
	aca ggcgcg		16
32 0			
<210>	728		
<211>	14		
<212>	DNA		
<213>	Homo sapiens		

WO 2005/063985	700 / 752	PCT/JP2004/019763
<400> 728 acaggcgcgc cgcg		14
<210> 729 <211> 17 <212> DNA <213> Homo sapiens	•	
<400> 729 ttettcaacg ggacgga		17
<210> 730 <211> 17 <212> DNA <213> Homo sapiens		
<400> 730 actctacggg tgagtgt		17
<210> 731 <211> 18 <212> DNA <213> Homo sapiens		
<400> 731 ccataaccag gaggagaa		18
<210> 732 <211> 18 <212> DNA <213> Homo sapiens		·
<400> 732. ccataaccag gaggagtt		18
<210> 733 <211> 16 <212> DNA <213> Homo sapiens		
<400> 733 agaggagttc gtgcgc		16
<210> 734 <211> 18 <212> DNA <213> Homo sapiens		
<400> 734 ctataaccag gaggagtt		18
<210> 735 <211> 16		

WO 2005/063985	701 / 752	PCT/JP2004/019763
<212> DNA <213> Homo sapiens		
<400> 735 ggaggacttg cgcttc		16
<210> 736 <211> 16 <212> DNA <213> Homo sapiens	·	
<400> 736 cctggaagac aggcgg		16
<210> 737 <211> 19 <212> DNA <213> Homo sapiens		
<400> 737 tacgtetgag tgteattte		19
<210> 738 <211> 17 <212> DNA <213> Homo sapiens		
<400> 738 ttcctggaag acaggcg		17
<210> 739 <211> 18 <212> DNA <213> Homo sapiens		
<400> 739 tettggaget gettaagt		18
<210> 740<211> 16 <212> DNA <213> Homo sapiens	3	
<400> 740 gcctgatgag gagcac		16
<210> 741 <211> 17 <212> DNA <213> Homo sapiens		
<400> 741 atgaggagca ctggaac		17

<210>	742	
		•
<211>	15	
	DNA	
<213>	Homo sapiens	
<400>	742	
	egg tggac	15
CEEECCE.	766 V664C	10
	V.	
<210>	743	
<211>	18	
<212>	DNA	
	Homo sapiens	
1210-	110mo baptono	
<400s	749	
<400>		10
tgatgag	gac tactggaa	18
<210>	744	
<211>	17	
<212>		
<213>	Homo sapiens	
<400>	744	
	ggg tactgga	17
Pare Sub	566 444-664	
10.10-	E 4 E	
<210>		
	18	
<212>	DNA	
<213>	Homo sapiens	
1210	1201110 0011120	
<400>	745	. 10
<400>		18
<400>	745	18
<400>	745	18
<400> catggca	745 gtt ctgacagt	18
<400> catggca;	745 gtt ctgacagt 746	18
<400> catggca; <210> <211>	745 gtt ctgacagt 746 17	18
<400> catggca; <210> <211> <212>	745 gtt ctgacagt 746 17 DNA	18
<400> catggca; <210> <211> <212>	745 gtt ctgacagt 746 17	18
<400> catggca; <210> <211> <212> <213>	745 gtt ctgacagt 746 17 DNA Homo sapiens	18
<400> catggca; <210> <211> <212>	745 gtt ctgacagt 746 17 DNA Homo sapiens	
<400> catggca; <210> <211> <212> <213> <400>	745 gtt ctgacagt  746 17 DNA Homo sapiens	18
<400> catggca; <210> <211> <212> <213> <400>	745 gtt ctgacagt 746 17 DNA Homo sapiens	
<400> catggca; <210> <211> <212> <213> <400>	745 gtt ctgacagt  746 17 DNA Homo sapiens	
<400> catggca; <210> <211> <212> <213> <400> gtgcggt;	745 gtt ctgacagt  746 17 DNA Homo sapiens  746 tac tggagag	
<400> catggca   <210> <211> <212> <213> <400> gtgcggt	745 gtt ctgacagt  746 17 DNA Homo sapiens  746 tac tggagag	
<400> catggca; <210> <211> <212> <213> <400> gtgcggt; <210> <211>	745 gtt ctgacagt  746 17 DNA Homo sapiens  746 tac tggagag	
<400> catggca; <210> <211> <212> <213> <400> gtgcggt; <210> <211>	745 gtt ctgacagt  746 17 DNA Homo sapiens  746 tac tggagag	
<400> catggca; <210> <211> <212> <213> <400> gtgcggt; <210> <211> <212>	745 gtt ctgacagt  746 17 DNA Homo sapiens  746 tac tggagag  747 15 DNA	
<400> catggca; <210> <211> <212> <213> <400> gtgcggt; <210> <211> <212>	745 gtt ctgacagt  746 17 DNA Homo sapiens  746 tac tggagag	
<400> catggca; <210> <211> <212> <213> <213> <400> gtgcggt; <210> <211> <212> <213>	745 gtt ctgacagt  746 17 DNA Homo sapiens  746 tac tggagag  747 15 DNA Homo sapiens	
<400> catggca; <210> <211> <212> <213> <213> <400> gtgcggt; <211> <212> <211> <400> <400> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210>	745 gtt ctgacagt  746 17 DNA Homo sapiens  746 tac tggagag  747 15 DNA Homo sapiens	17
<400> catggca; <210> <211> <212> <213> <213> <400> gtgcggt; <211> <212> <211> <400> <400> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210>	745 gtt ctgacagt  746 17 DNA Homo sapiens  746 tac tggagag  747 15 DNA Homo sapiens	
<400> catggca; <210> <211> <212> <213> <213> <400> gtgcggt; <211> <212> <211> <400> <400> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210>	745 gtt ctgacagt  746 17 DNA Homo sapiens  746 tac tggagag  747 15 DNA Homo sapiens	17
<400> catggca; <210> <211> <212> <213> <213> <400> gtgcggt; <211> <212> <211> <400> <400> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210>	745 gtt ctgacagt  746 17 DNA Homo sapiens  746 tac tggagag  747 15 DNA Homo sapiens  747 747 getc ctgcg	17
<400> catggca; <210> <211> <212> <213> <213> <400> gtgcggt; <211> <212> <211> <400> <400> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210> <210>	745 gtt ctgacagt  746 17 DNA Homo sapiens  746 tac tggagag  747 15 DNA Homo sapiens	17
<400> catggca; <210> <211> <212> <213> <400> gtgcggt; <210> <211> <212> <211> <210> <211> <210> <210> <210> <210> <210> <210> <210> <213> <400> ggaggagagagagagagagagagagagagagagagaga	745 gtt ctgacagt  746 17 DNA Homo sapiens  746 tac tggagag  747 15 DNA Homo sapiens  747 getc ctgcg	17
<400> catggca; <210> <211> <212> <213> <400> gtgcggt; <210> <211> <212> <211> <211> <211> <211> <211> <211> <211> <212> <213> <400> ggagga; <400> <211> <210> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211< <211> <211< <211	745 gtt ctgacagt  746 17 DNA Homo sapiens  746 tac tggagag  747 15 DNA Homo sapiens  747 getc ctgcg	17
<400> catggca; <210> <211> <212> <213> <400> gtgcggt; <210> <211> <212> <211> <212> <211> <212> <213> <400> ggagga; <210> <211> <212> <213> <400> ggagga; <400> <210> <211> <212> <213> <211> <212> <213> <400> <211> <212> <212> <213> <400> <211> <212> <212> <213> <400> <211> <212> <212> <212> <213> <400> <211> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <212> <2	745 gtt ctgacagt  746 17 DNA Homo sapiens  746 tac tggagag  747 15 DNA Homo sapiens  747 qctc ctgcg	17
<400> catggca; <210> <211> <212> <213> <400> gtgcggt; <210> <211> <212> <211> <211> <211> <211> <211> <211> <211> <212> <213> <400> ggagga; <400> <211> <210> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211> <211< <211> <211< <211	745 gtt ctgacagt  746 17 DNA Homo sapiens  746 tac tggagag  747 15 DNA Homo sapiens  747 getc ctgcg	17

WO 2005/063985	703 / 752	PCT/JP2004/019763
<400> 748 catcctggga gacagg		16
<210> 749 <211> 16 <212> DNA <213> Homo sapiens		
<400> 749 gtgcggttcc tggaga	,	16
<210> 750 <211> 15 <212> DNA <213> Homo sapiens	•	
<400> 750 gagegggetg eggtg		15
<210> 751 <211> 15 <212> DNA <213> Homo sapiens		
<400> 751 gaagacgagc gcgcc		15
<210> 752 <211> 14 <212> DNA <213> Homo sapiens		
<400> 752 acgagegege egeg		14
<210> 753 <211> 16 <212> DNA <213> Homo sapiens		
<400> 753 ctggaagaca agcggg		16
<210> 754 <211> 16 <212> DNA <213> Homo sapiens		
<400> 754 ggaagacaag cgggcc		16
<210> 755 <211> 17		

WO 2005/063985	704 / 752	PCT/JP2004/019763
<212> DNA <213> Homo sapien	us.	<i>₹</i> •
<400> 755 ggagtactct acgtetg		17
<210> 756 <211> 19 <212> DNA <213> Homo sapien	ıs .	
<400> 756 gacagatact tetataace		19
<210> 757 <211> 16 <212> DNA <213> Homo sapien	u <b>s</b>	
<400> 757 cggggttgat gagagc		16
<210> 758 <211> 17 <212> DNA <213> Homo sapien	as	
<400> 758 acaactaccg ggttgtg		17
<210> 759 <211> 15 <212> DNA <213> Homo sapien	ıs	
<400> 759 cggcctgtcg ccgag		15
<210> 760 <211> 16 <212> DNA <213> Homo sapien	ıs	
<400> 760 ggagaacetg egette		16
<210> 761 <211> 16 <212> DNA <213> Homo sapier	ıs	
<400> 761 ggagttcctg gcggtg		16

WO 2005/063985	705 / 752	PCT/JP2004/019763
-010> 700		
<210> 762 <211> 15		
<211> 13 <212> DNA	×	
<213> Homo sapiens		
<400> 762	•	
cggcctgtcg ccgag		15
<210> 763		
<211> 15		•
<212> DNA		
<213> Homo sapiens		
<400> 763		
ccggcgttg acgga		15
0088808008 00880		10
.010- 504		
<210> 764		
<211> 18 <212> DNA		
<212> DNA <213> Homo sapiens		
1210 Homo sapiens		
<400> 764		
ttggagtact ctacgtct		18
<210> 765		
<211> 20		
<212> DNA		
<213> Homo sapiens		
<400> 765		
ctgagtgtca attcttcaat		20
.010. 500		
<210> 766 <		
<211> 17 <212> DNA		
<212> DNA <213> Homo sapiens		
· ·		
<400> 766		
cetgatgetg agtactg		17
<210> 767		•
<211> 19		
<212> DNA		
<213> Homo sapiens		
<400> 767		
gtttettgga gtaetetae		19
Present Present		~~
c010> #00		
<210> 768 <211> 16		
<211> 16 <212> DNA		
<212> DNA <213> Homo caniens		

<213> Homo sapiens

WO 2005/063985	706 / 752	PCT/JP2004/019763
gegggtgeag tteetg		16
<210> 769 <211> 16 <212> DNA <213> Homo sapiens		
<400> 769 cgacgtgcgg gagtac	3	16
<210> 770 <211> 17 <212> DNA <213> Homo sapiens		
<400> 770 ccctacgtct gagtgtc		17
<210> 771 <211> 16 <212> DNA <213> Homo sapiens		
<400> 771 ggaggagttc ctgcgc		16
<210> 772 <211> 16 <212> DNA <213> Homo sapiens		
<400> 772 ggagtteetg egette	·	16
<210> 773 <211> 16 <212> DNA <213> Homo sapiens		
<400> 773 ggtggacgcc tattgc		16
<210> 774 <211> 16 <212> DNA <213> Homo sapiens		
<400> 774 ggetttgtet ggggac		16
<210> 775 <211> 18 <212> DNA		

	WO 2005/063985	707 / 752	PCT/JP2004/019763
	<213> Homo sapiens		
	<400> 775		
	<400> 775		18
	caactacgga gttgtgga	•	10
	<210> 776		
	<211> 17		
	<212> DNA	<b>,</b>	
	<213> Homo sapiens		
	<400> 776		15
	ggagttgtgg agagett		17
	<210> 777		
	<211> 17		
	<212> DNA <213> Homo sapiens		
	213 Homo sapiens		
	<400> 777	·	
	cctaagaggg agtgtca		17
	<210> 778		
	<211> 19		
	<212> DNA		
	<213> Homo sapiens		
	<400> 778		
•	cttctataat caggaggag		19
	Concratation cassassas		10
	<210> 779		
	<211> 18	,	
	<212> DNA		
	<213> Homo sapiens	•	
	<400> 770		
	<400> 779 ctggacagac acttctat		18
	ciggacagac acticiat		10
	<210> 780		
	<211> 17		
	<212> DNA		
	<213> Homo sapiens		
	<400> 780		
	agaaggactt cctggag		17
•	<210> 781		
	<211> 14		
	<212> DNA		
	<213> Homo sapiens		
	<400> 781		
	cgggcggcga cgga		14
			•
	•	•	

WO 2005	5/063985	708 / 752	PCT/JP2004/019763
<210><211><211><212><213>	17		
<400> gccagaa	782 agaa cateetg		17
<210><211><211><212><213>	16	· •	
<400> ggagttc	783 cag gcggtg		16
<210><211><211><212><213>	18		
<400>			18
<210><211><211><212><213>	14		
	785 geeg eege		14
<210><211><211><212><213>	16		
<400>	_		16
<210><211><211><212><213>	17		
<400> ggagctg	787 cgt aagtetg		17
<210> <211> <212> <213>	16		

WO 2005/063985	709 / 752	PCT/JP2004/019763
ctggctttcg ctgggg		16
<210> 789 <211> 18 <212> DNA <213> Homo sapiens		
<400> 789 ttggagctgt gtaagtet		18
<210> 790 <211> 17 <212> DNA <213> Homo sapiens		
<400> 790 ggagctgtgt aagtctg		17
<210> 791 <211> 18 <212> DNA <213> Homo sapiens		
<400> 791 gtacctggag agatactt		18
<210> 792 <211> 18 <212> DNA <213> Homo sapiens		
<400> 792 cggtacctga acagatac		18
<210> 793 <211> 15 <212> DNA <213> Homo sapiens		
<400> 793 gagcagaagc ggggc		15
<210> 794 <211> 16 <212> DNA <213> Homo sapiens		
<400> 794 ggagtacgcg cgcttc	•	16
<210> 795 <211> 17 <212> DNA		

<b>WO 2005/0</b>	063985	710 / 752	PCT/JP2004/019763
<213>	Homo sapiens		
<400> '	795		
agttcctga			17
-			
<210>	796		
<211>			
<212>			
	Homo sapiens		Ş
<400>	706		•
	g agetgett		18
-5	,		
<210>	707		
<211>			•
<211> <212> ]			
	Homo sapiens		
<400> ′			10
ctggagag	ac acttccat		18
<210> ′			
<211>			
<212>			
<b>\213</b> / 1	Homo sapiens		
<400> ′	798		
ttactgcag	g cacaacta		18
			•
<210>			
<211>		•	
<212> ]			
<215>	Homo sapiens		
<400>			
cctgatgcg	gg agtactg		, 17
	200		
<210> 8			
<211>			
<212> ]			
<213 <i>&gt;</i>	Homo sapiens		
<400>			
ggaggaga	ac gegeg		15
		,	
<210>			
<211>			
<212>			
<213>	Homo sapiens		
<400>	301		
	cg cgcttc		16

WO 2005/063985	711 / 752	PCT/JP2004/019763
<210> 802 <211> 18 <212> DNA <213> Homo sapiens		
<400> 802 egtttettge agetgett		18
<210> 803 <211> 15 <212> DNA <213> Homo sapiens	· ·	
<400> 803 ggtgcggctc ctgga		15
<210> 804 <211> 16 <212> DNA <213> Homo sapiens		
<400> 804 cggggttgct gagagc		16
<210> 805 <211> 17 <212> DNA <213> Homo sapiens		
<400> 805 aactacggcg ttgtgga		17
<210> 806 <211> 17 <212> DNA <213> Homo sapiens		
<400> 806 gacattgacg gtgctga		17
<210> 807 <211> 16 <212> DNA <213> Homo sapiens		
<400> 807 cgaggtgggc acctac		16
<210> 808 <211> 17 <212> DNA <213> Homo sapiens	•	
<400> 000		

WO 2005/063985	712 / 752	PCT/JP2004/019763
gtgtggaacc tgatcag		17
<210> 809 <211> 18 <212> DNA <213> Homo sapiens		N
<400> 809 ggacacctat tgcagata		18
<210> 810 <211> 17 <212> DNA <213> Homo sapiens		
<400> 810 aacagtgatc tggggga		17
<210> 811 <211> 19 <212> DNA <213> Homo sapiens		
<400> 811 tactgcagat acaactacg		19
<210> 812 <211> 18 <212> DNA <213> Homo sapiens		
<400> 812 tgtcatttcc tcaatggg		18
<210> 813 <211> 17 <212> DNA <213> Homo sapiens		
<400> 813 gagtgtggaa cctgatc		17
<210> 814 <211> 17 <212> DNA <213> Homo sapiens		
<400> 814 catggcaaag ctgacag		17
<210> 815		

<211> 18 <212> DNA

WO 2005	5/063985	713 / 752	PCT/JP2004/019763
<213>	Homo sapiens	•	
<400> cgtttctt	815 gc agcaggat		18
<210> <211> <212> <213>	18		
<400> ctgcaca	816 gag gcatctat	·	18
<210> <211> <212> <213>	15	1	
<400> gaagaca	817 acgc gcgcc		15
<210> <211> <212> <213>	14		
<400> acacgcg	818 gege egeg		14
<210> <211> <212> <213>	16		
<400> cctggaa	819 Laac aggege		16
<210> <211> <212> <213>	17		
<400> aggttcc	820 tac atggcag		17
<210> <211> <212> <213>	18		
<400> tgtttctt	821 gc agcaggat		18

t

WO 2005/063985	714 / 752	PCT/JP2004/019763
<210> 822		
<211> 20		
<212> DNA		
<213> Homo sapiens		
<400> 822		•
agagtactcc aagaaacgtg		20
<210> 823		
<211> 18		,
<212> DNA		•
<213> Homo sapiens		
<400> 823		18
ccgctgcacc gtgaagct		
<210> 824		
<211> 18		
<212> DNA		
<213> Homo sapiens		
<400> 824		10
tegetgeact gtgaaget		18
<210> 825		
<211> 18		
<212> DNA		
<213> Homo sapiens		
<400> 825		
cetetgeact gtgaaget		18
<210> 826		
<211> 27		
<211> 21 <212> DNA		
<213> Homo sapiens		
<400> 826		
ceggateett egtgteecca eageaeg		27
<210> 827		
<211> 21		
<212> DNA <213> Homo sapiens		
_		
<400> 827		
aaccccgtag ttgtgtctgc a		21

## SEQUENCE LISTING MICA

<110>	CANON KABUSHIKI KAISHA	
<120>	Probe set and method for identifying HLA allele	
<130>	g10003828mica	
<150> <151>	JP2003-430559 2003-12-25	
<160>	162	
<170>	PatentIn version 3.2	
<210><211><211><212><212><213>	1 18 DNA Homo sapiens	
<400>	1	
gggaca	gag agaccaga	18
<210><211><211><212><213>	2 19 DNA Homo sapiens	
<400>	2	
cccaaa	acc tggagacta	19
<210><211><211><212><212><213>	3 20 DNA Homo sapiens	
<400>	3	
ggaacta	legg egatatetaa	20
<210><211><211><212><213>		
	4 atc taaaatccg	19
<210><211><211><212><213>	5 19 DNA Homo sapiens	
	5 tat cacactgag	19
<210>	6	

<211> 25

WO 2005/063985	716 / 752	PCT/JP2004/019763
<212> DNA <213> Homo sapiens		
<400> 6 tatttttgtt attattattt tctac		25
<210> 7 <211> 17 <212> DNA		V
<213> Homo sapiens		,
<400> 7 cctcacggtg ctgtccg	,	17
<210> 8 <211> 18		
<212> DNA <213> Homo sapiens		
<400> 8 gtgaatgtca cccgcagt		18
<210> 9 <211> 18		
<211> ONA <212> DNA <213> Homo sapiens		
<400> 9 cgtagtcctg aggagaag		18
<210> 10 <211> 18		
<211> 10 <212> DNA <213> Homo sapiens		
<400> 10tcagcctctg atgtcagc		18
<210> 11 <211> 17		
<212> DNA <213> Homo sapiens		
<400> 11 cagecettee tgegeta		17
<210> 12 <211> 19 <212> DNA <213> Homo sapiens		
<400> 12 gagactgagg aatggacag		19

WO 2005/063985	717 / 752	PCT/JP2004/019763
<210> 13 <211> 19 <212> DNA <213> Homo sapiens		
<400> 13 cccggaatat cacactgac		19
<210> 14 <211> 17 <212> DNA <213> Homo sapiens	•	·
<400> 14 gccaccagga tttgccg		17
<210> 15 <211> 20 <212> DNA <213> Homo sapiens		
<400> 15 gcgatatcta gaatccagca		20
<210> 16 <211> 17 <212> DNA <213> Homo sapiens		
<400> 16 gggacagaga gaccagg		.17
<210> 17 <211> 18 <212> DNA <213> Homo sapiens		
<400> 17 cccaaaacct ggagactg		18
<210> 18 <211> 19 <212> DNA <213> Homo sapiens		
<400> 18 gtttetgetg ttgetgetg		19
<210> 19 <211> 17 <212> DNA <213> Homo sapiens		
<400> 19 agacctgggt ggccact		17

WO 2005	5/063985	718 / 752	PCT/JP2004/019763
<210><211><211><212><213>	17		
<400>	20tgctgctggc tgctgct	•	17
<210><211><211><212><213>	16	V	
<400> cacccgc	21 agc gaggca		16
<210> <211> <212> <213>	19		
<400> etetteet	22 ct cccaaaacg		19
<210><211><211><212><213>	20		
<400> gctccca	23 gca tttctactat		20
<210><211><211><212><213>	24 19 DNA Homo sapiens	·	
<400> cggcgat	24 catc tagaatcca		19
<210><211><211><212><213>	17		
<400> gtcagct	25 ctt gggteeg	·	17
<210><211><211><212><213>	19		
<400> ccatgaa	26 agac caagacact		19

				*
<210>	27		•	
<211>	18			
<212>	DNA			
<213>	Homo sapiens		•	
<400>	2.7			
				18
igicaag	gag aggagcaa			10
			• •	
<210>	28			•
<211>	19			
<212>	DNA			
<213>	Homo sapiens			
~210~	Homo sapiens	•		
- 1005	00			
<400>	28			10
gaactac	ggc gatatctag			19
<210>	29			
<211>	20			
<212>	DNA			
<213>	Homo sapiens			
			,	
<400>	29			
	ttc tactacgata			20
coapoar	vio taotaobata			
<210>	20			
	30		•	
<211>	17	•		
<212>	DNA			
<213>	Homo sapiens			
	•			
<400>	30			
			·	17
geigeag	agg gtccagg			11
			•	
<210>	31			
<211>	17		•	
<212>	DNA			
<213>	Homo sapiens			
~210~	riomo sapiens			
-1005	0.1			
<400>				15
ctggcgt	cag gatgggc	1		17
<210>	32			
<211>	17			
<212>	DNA			
<213>	Homo sapiens		•	
<400>	32	•		
	att ccctccg			17
550050	~~~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			- ·
×0.10-	00			
<210>	33			
<211>	18			
<212>	DNA			
<213>	Homo sapiens			
	-			

WO 200	5/063985	720 / 752	PCT/JP2004/019763
cccagtt	ggg acgagtgt		18
<210> <211> <212> <213>	17		
<400> ctgctgct	34 egc tgctgct	en e	17
<210> <211> <212> <213>	19		•
<400> agaaga	35 tgtc ctgggaaac		19
<210> <211> <212> <213>	19	,	
<400> tgtgcag	36 tca gggtttctt		19
	18 DNA Homo sapiens		
<400> gcctcag	37 agg gcaacatc		18
<210><211><211><212><213>	17		
<400> ctgctgc	38 tgc tgctgct		17
<210> <211> <212> <213>	20		
<400> ttctatco	39 cc ggaatatcat		20
<210><211><211><212><213>	18		

<213> Homo sapiens

<400>	40gttgetgetg etgetget		18
<210>	41	•	
<211>			
<212>			·
<213>	Homo sapiens		
<400>		<b>,</b>	
cagacct	tgg ccatgaaca	,	19
<210>			
<211>			
<212>			
<213>	Homo sapiens		
<400>	•		10
ggaatca	cag cactcacg		18
.010:			
<210>			
<211><212>			
	Homo sapiens		
<400>			
acggcga	tat ctaaaatcca		20
<210>	44		
<211>			
<212>	DNA		
<213>	Homo sapiens		
<400>	44		
ctctccca	aa acctggagt		19
<210>			
<211>		•	
<212>			
<b>~213</b> ~	Homo sapiens		
<400>			
ttcttga	agg aagatgeeg		19
<210>		-	
<211>			
<212>			
<213>	Homo sapiens		
<400>			90
catgaa	gaca acagcaccaa		20
<210>	47		
<211>	17 .		
<212>			
ZO 1 O-	TT	· · · · · · · · · · · · · · · · · · ·	

WO 2005/063985	722 / 752	PCT/JP2004
<400> 47 gggtttctcg ctgaggg		17
<210> 48 <211> 18 <212> DNA		
<213> Homo sapiens <400> 48		,
caaggagagg agcagagt		18
<210> 49 <211> 17 <212> DNA <213> Homo sapiens	•	
<400> 49 ggccaccagg atttgcg		17
<210> 50 <211> 18 <212> DNA <213> Homo sapiens		
<400> 50 cagggettet ggettetg		18
<210> 51 <211> 20 <212> DNA <213> Homo sapiens		
<400> 51 agaaaacatc agctgcagat		20
<210> 52 <211> 19 <212> DNA <213> Homo sapiens		. •
<400> 52 atcaacaccc agttgggat		19
<210> 53 <211> 19 <212> DNA <213> Homo sapiens		
<400> 53 agagaccaga gacttgaca		19
<210> 54 <211> 19		

PCT/JP2004/019763

WO 2005	5/063985	723 / 752	PCT/JP2004/019763
<212> <213>	DNA Homo sapiens		
<400> ctggaga	54 icta aggaatgga	•	19
<210> <211> <212> <213>	19	ŕ	
<400> cgatate	55 taa aateeggeg		19
<210> <211> <212> <213>	19		
<400> ctaaaat	56 ccg gcgtagtcc		19
<210> <211> <212> <213>	17		
<400> cacactg	57 agc tggcgtc		17
<210><211><211><212><213>	22		
<400> attatttt	58 ct acgtetgttg tt		22
<210> <211> <212> <213>	17		
<400> tgctgtco	59 egg ggatgga		17
<210> <211> <212> <213>	17		· i
<400> accegca	60 gtg aggeete		17

<b>WO 2005</b>	/063985	724 / 752	PCT/JP2004/019763
<210> <211> <212> <213>	17		
<400> gaggaga	61 laga gtgcccc	· -	17
<210> <211> <212> <213>	19 DNA		·
<400> tgatgtca	62 igc tettgggte		19
<210> <211> <212> <213>	17 DNA		
<400> cctgcgct	63 at gacagge	•	17
<210> <211> <212> <213>	18		
<400> gaatgga	64 .cag tgccccag		18
<210><211><211><212><213>	17		·
<400> cacactg	65 acc tggcgtc		17
<210><211><211><212><213>	18		
<400> ggatttg	66 ccg aggagagg		18
<210> <211> <212> <213>	19		

<400> 67

WO 2005	5/063985	725 / 752		PCT/JP2004/019763
gaatcca	gca tagtcctga			19
<210> <211> <212> <213>	18	,		
<400> agagaco	68 cagg gacttgac		ķ	18
<210><211><211><212><213>	18			
<400> ctggaga	69 actg aggaatgg			18
<210> <211> <212> <213>	17			·
<400>	70gttgetgetg getgetg			17
<400>	18 DNA Homo sapiens			18
	•			
<210><211><211><212><213>	17			
<400> gctgctg	72 get getgeta			17
<210> <211> <212> <213>	17			
<400> agcgag	73 gcat cagaggg			17
<210> <211> <212> <213>	74 19 DNA Homo sapiens		· .	

WO 2005/063985	726 / 752	PCT/JP2004/019763
<400> 74 tcccaaaacg tggagactg		19
<210> 75 <211> 20 <212> DNA <213> Homo sapiens		•
<400> 75 atttctacta tgatggggag		20
<210> 76 <211> 19 <212> DNA <213> Homo sapiens		
<400> 76 ctagaatcca gcgtagtcc	·	19
<210> 77 <211> 16 <212> DNA <213> Homo sapiens		
<400> 77 tgggtccgct ggctcc	^	16
<210> 78 <211> 19 <212> DNA <213> Homo sapiens		
<400> 78 ccaagacact ctatcacgc	,	19
<210> 79 <211> 19 <212> DNA <213> Homo sapiens		
<400> 79 agaggagcaa aggttcacc		19
<210> 80 <211> 19 <212> DNA <213> Homo sapiens		
<400> 80 cgatatctag aatccggcg		19
<210> 81 <211> 19		•

WO 2005	5/063985	727 / 752	PCT/JP2004/019763
<212> <213>	DNA Homo sapiens		
<400> tactacg	81 ata gggagetet		19
<210> <211> <212> <213>	16	,	. ·
<400> gggtcca	82 ggg ctcgtg		16
<210><211><211><212><212><213>	19 DNA Homo sapiens		
	ggc tatctttga		19
<210> <211> <212> <213>	19		
<400> attecete	84 eeg ggagattag		19
<210> <211> <212> <213>	18		
<400> tgctgct <sub>i</sub>	85 get getgetat		18
<210> <211> <212> <213>	20 DNA		
<400> ctgctgc	86 tgc tatttttgtt	·	20
<210> <211> <212> <213>			
<400> cctggga	87 laac aagacatgg		19

WO 2005	5/063985	728 / 752	PCT/JP2004/019763
<210> <211> <212> <213>	19		
<400> agggttt	88 ctt gctgaggta	·	19
<210><211><211><212><213>	18	· ·	
<400> gggcaac	89 catc accgtgac		18
<210><211><211><212><213>	18		
<400>	90gctgctgctg ctgctatt		18
	91 20<212> DNA Homo sapiens		
<400> cggaata	91 tca tactgacctg		20
<210><211><211><212><213>	20		
<400> gccatga	92 aca tcaggaattt		20
<210><211><211><212><213>	17		
<400> gcactca	93 ege tgtgeec		17
<210><211><211><212><213>	19		
<400> ctaaaa	94 teca gegtagtee		19

WO 2005/063985	729 / 752	PCT/JP2004/019763
<211> 19 <212> DNA <213> Homo sapiens		
<400> 95 aacctggagt ctgaggaat		19
<210> 96 <211> 18 <212> DNA <213> Homo sapiens		, , , , , , , , , , , , , , , , , , ,
<400> 96 gaagatgccg tgaagacc		18
<210> 97 <211> 17 <212> DNA <213> Homo sapiens		
<400> 97 cagcaccaag agctccc		17
<210> 98 <211> 17 <212> DNA <213> Homo sapiens		
<400> 98 cgctgaggga catctgg		17
<210> 99 <211> 18 <212> DNA <213> Homo sapiens		·
<400> 99 ggagcagagt ttcacctg		18
<210> 100 <211> 19 <212> DNA <213> Homo sapiens		
<400> 100 aggatttgcg aaggagagg		19
<210> 101 <211> 18 <212> DNA <213> Homo sapiens		
<400> 101		18

 ${\tt ctggcttctg}\ {\tt tccctgga}$ 

<210> <211> <212> <213>	18	
	102 gat ggtccaga	18
<210><211><211><212><213>	18	
<400>	103 gat gagtgacc	18
<210><211><211><212><212>	22 DNA	
<400>	Homo sapiens  104 gcca gtggacccaa ga	22
<210><211><211><212><212>	23 DNA	
<400>	Homo sapiens  105 tc ttcttacaac aac	23
<210> <211> <212>	22 DNA	
<213> <400> gtcttcgt	Homo sapiens  106 ta taacctcacg gt	22
<210> <211> <212>	22 DNA	
<400>	Homo sapiens  107 agc ctgcaggtcc tg	22
<210><211><211><212><213>	22	

600

660

```
<400> 108
                                                                         22
agtggagcca gtggacccaa ga
<210>
        109
<211>
        1082
<212>
        DNA
<213>
        Homo sapiens
<220>
<221>
        misc_feature
<222>
        (873)..(875)
<223>
        n is a, c, g, or t
<220>
<221>
        misc_feature
<222>
        (882)..(899)
<223>
        n is a, c, g, or t
<400>
                                                                   60
gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttetea
                                                                     120
etgaggtaca tetggatggt eagecettee tgegetgtga eaggeagaaa tgeagggeaa
                                                                        180
agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca
                                                                       240
gagacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga
                                                                     300
aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagea
                                                                   360
ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga
                                                                     420
ctaaggaatg gacaatgeee cagteeteea gageteagae ettggeeatg aaegteagga
atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact
                                                                     480
                                                                     540
gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc
ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg
                                                                     600
cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga
                                                                   660
gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct
                                                                     720
                                                                      780
gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca
gegggaatea eageacteae eetgtgeeet etgggaaagt getggtgett eagagteatt
                                                                    840
                                                                        900
ggcagacatt ceatgtttct gctgttgctg ctnnngctgc tnnnnnnnn nnnnnnnn
                                                                   960
tttttgttat tattattttc tatgtccgtt gttgtaagaa gaaaacatca gctgcagagg
                                                                    1020
gtccagaget egtgageetg caggteetgg atcaacacec agttgggaeg agtgaccaca
                                                                  1080
gggatgccac acagetegga ttteagecte tgatgteaga tettgggtee actggeteea
                                                                       1082
ct
<210>
        110
<211>
        1076
<212>
        DNA
<213>
        Homo sapiens
<400>
        110
                                                                    60
gtettegtta taaceteaeg gtgetgteeg gggatggate tgtgeagtea gggttteteg
ctgaggtaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa
                                                                     120
agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca
                                                                        180
                                                                       240
gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga
                                                                     300
aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagea
                                                                    360
ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga
                                                                     420
ctgaggaatg gacaatgeee cagteeteea gageteagae ettggeeatg aacgteagga
                                                                     480
atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact
                                                                     540
gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc
```

ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct
gggtggccac caggatttgc caaggaggg agcagaggtt cacctgctac atggaacaca
780
gcgggaatca cagcactcac cctgtgccct ctgggaaagt gctggtgctt cagagtcatt
ggcagacatt ccatgtttct gctgttgetg ctgctgctgct gctgctgct gctatttttg
900
ttattattat tttctacgtc tgttgttgta agaagaaaac atcagctgca gagggtccag
agctcgtgag cctgcaggtc ctggatcaac acccagttgg gacgagtgac cacagggatg
1020
ccacacagct cggatttcag cctctgatgt cagatcttgg gtccactggc tccact
1076

<210> 111 <211> 813 <212> DNA <213> Homo sapiens

<400> 111

60 gtettegtta taaceteaeg gtgetgteeg gggatggate tgtgeagtea gggttteteg 120 ctgaggtaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 240 aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagea 300 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 360 420 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga atttettgaa ggaagatgee atgaagacca agacacacta teacgetatg catgeagact 480 gcetgeagga actaeggega tatetaaaat eeggegtagt eetgaggaga acagtgeece 540 ccatggtgaa tgtcacccgc agtgaggcct cagagggcaa cattaccgtg acatgcaggg 600 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 660 gecaegacae ceageagtgg ggggatgtee tgeetgatgg gaatggaace taccagacet 720 gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 813 gegggaatea eageaeteae eetgtgeeet etg

<210> 112 <211> 1067 <212> DNA <213> Homo sapiens

<400> 112

60 gtcttcgtta taacctcacg gtgctgtcct gggatggatc tgtgcagtca gggtttcttg 120 ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa 180 agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 240 300 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccageattte tactacgatg gggagetett ceteteccaa aacgtggaga 420 ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga atttcttgaa ggaagatgcc atgaagacca agacacacta tcacgctatg catgcagact 480 gcctgcagga actacggcga tatctagaat ccagcgtagt cctgaggaga agagtgcccc 540 600 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg 660 cttccagctt ctatccccgg aatatcacac tgacctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 840 gegggaatea eageacteae eetgtgeeet etgggaaagt getggtgett eagagteatt ggcagacatt ccatgtttct gctgttgctg ctgctgctgc tgctattttt gttattatta 960 ttttctatgt ccgttgttgt aagaagaaaa catcagctgc agagggtcca gagctcgtga 1020 gcctgcaggt cctggatcaa cacccagttg ggacgagtga ccacagggat gccacacagc 1067 teggatttea geetetgatg teagetettg ggteeaetgg etecaet

<210> 113 <211> 812 <212> DNA

#### Homo sapiens <213>

<400> 113

gtettegtta taaceteacg gtgetgteet gggatggate tgtgeagtea gggtttettg 60 ctgaggtaca tctggatggt cagccettce tgegetatga caggcagaaa tgeagggeaa 120 agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180 240 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 420 atttettgaa ggaagatgee atgaagacca agacacacta teacgetatg catgeagact 480 540 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 600 660 cttccagctt ctatccccgg aatatcacac tgacctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 780 gggtggccac caggatttgc cgaggagagg agcagaggtt cacctgctac atggaacaca 812 gegggaatca cagcactcac cetgtgeeet et

<210> 114

<211> 1067

<212> **DNA** <213> Homo sapiens

## <400> 114

60 gtcttcgtta taacctcacg gtgctgtcct gggatggatc tgtgcagtca gggtttcttg 120 etgaggtaca tetggatggt cagecettee tgegetatga caggeagaaa tgeagggeaa agececaggg acagtgggca gaagatgtee tgggaaataa gacatgggac agagagacca 180 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 240 300 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacgtggaga 420 ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 480 atttettgaa ggaagatgee atgaagacca agacacacta teacgetatg catgeagact geetgeagga actaeggega tatetagaat eeagcatagt eetgaggaga acagtgeece 540 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg 600 660 cttccagctt ctatccccgg aatatcacac tgacctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 840 gegggaatea eageacteae eetgtgeeet etgggaaagt getggtgett eagagteatt  ${\tt ggcagacatt\ ccatgtttct\ gctgttgctg\ ctgctgctgc\ tgctatttt\ gttattatta}$ 960 ttttctatgt ccgttgttgt aagaagaaaa catcagctgc agagggtcca gagctcgtga gcctgcaggt cctggatcaa cacccagttg ggacgagtga ccacagggat gccacacagc 1020 teggatttca gcctctgatg teagetettg ggtccactgg etccact 1067

<210> 115

<211> 945

<212> DNA

<213> Homo sapiens

# <400> 115

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggttteteg 120 ctgaggtaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagca 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 420 4 etgaggaatg gacaatgeec cagteeteea gageteagae ettggeeatg aacgteagga atttettgaa ggaagatgee atgaagacea agacacacta teaegetatg catgeagact 480 540 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc

180

ccatggtgaa tgtcacccgc agtgaggcct cagagggcaa cattaccgtg acatgcaggg 600 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 660 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 gegggaatca cagcactcac cetgtgecet etgggaaagt getggtgett cagagteatt 840 ggcagacatt ccatgtttct getgttgctg etgetgetat ttttgttatt attattttet atgtccgttg ttgtaagaag aaaacatcag ctgcagaggg tccag 945

<210> 116 <211> 813 <212> DNA Homo sapiens <213>

<400>

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggttteteg 120 etgaggtaca tetggatggt cagecettee tgegetgtga caggeagaaa tgeagggeaa 180 agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 240 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacaatgccc cagteeteca gageteagae ettggecatg aacgteagga 480 atttettgaa ggaagatgee atgaagacea agacacacta teaegetatg catgeagact 540 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 600 660 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 780 gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 813 gegggaatea eageacteae eetgtgeeet etg

<210> 117 1065 <211> <212> DNA <213> Homo sapiens

# <400>

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 120 ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa agecceaggg acagtgggca gaagatgtee tgggaaataa gacatgggac agagagacca gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 240 300 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 480 atttettgaa ggaagatgee atgaagacca agacacacta teaegetatg catgeagact 540 gcctgcagga actacggcga tatctagaat ccggcgtagt cctgaggaga acagtgcccc ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg 600 660 cttccagctt ctatccccgg aatatcatac tgacctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct gggtggccac caggatttgc cgaggagagg agcagaggtt cacctgctac atggaacaca 780 gegggaatea eageacteae eetgtgeeet etgggaaagt getggtgett eagagteatt 840 ggcagacatt ccatgtttct gctgttgctg ctggctgctg ctatttttgt tattattatt 960 ttetatgtee gttgttgtaa gaagaaaaca teagetgeag agggteeaga getegtgage ctgcaggtcc tggatcaaca cccagttggg acgagtgacc acagggatgc cacacagctc 1020 1065 ggatttcagc ctctgatgtc agctcttggg tccactggct ccact

180

<210> 118 <211> 949 <212> DNA

#### Homo sapiens <213>

<400> 118

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 120 etgaggtaca tetggatggt eagecettee tgegetatga eaggeagaaa tgeagggeaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180 240 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 420 atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact 480 540 gcctgcagga actacggcga tatctagaat ccggcgtagt cctgaggaga acagtgcccc ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg 600 660 cttccagctt ctatccccgg aatatcatac tgacctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 780 gggtggccac taggatttgc cgaggagagg agcagaggtt cacctgctac atggaacaca 840 gegggaatca cagcactcac cetgtgecet etgggaaagt getggtgett cagagteatt ggcagacatt ccatgtttct gctgttgctg ctggctgctg ctatttttgt tattattatt 949 ttctatgtcc gttgttgtaa gaagaaaaca tcagctgcag agggtccag

<210> 119

<211> 813

<212> DNA

<213> Homo sapiens

<400> 119

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 120 ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180 240 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccageattte tactacgatg gggagetett ceteteccaa aacetggaga ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 420 atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact 480 gcctgcagga actacggcga tatctagaat ccggcgtagt cctgaggaga acagtgcccc 540 600 ccatggtgaa tgtcacccgc agcgaggcat cagagggcaa catcaccgtg acatgcaggg 660 cttccagctt ctatccccgg aatatcatac tgacctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct gggtggccac caggatttgc cgaggagagg agcagaggtt cacctgctac atggaacaca 780 813 gegggaatea eageacteae eetgtgeeet etg

<210> 120

1067 <211>

<212> DNA

<213> Homo sapiens

<400> 120

gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 60 ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagca 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacgtggaga ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact gcctgcagga actacggcga tatctagaat ccagcgtagt cctgaggaga acagtgcccc ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg 660 cttccagctt ctatccccgg aatatcacac tgacctggcg tcaggatggg gtatctttga

120

180

240

300

420 480

540

gccacgacac ccagcagtgg ggggatgtec tgcctgatgg gaatggaacc taccagacct gggtggccac caggatttgc caaggaggag agcagaggtt cacctgctac atggaacaca 780 gcggggaatca cagcactcac cctgtgccct ctgggaaagt gctggtgctt cagagtcatt 840 ggcagacatt ccatgtttet gctgttgctg ctgctgctgc tgctattttt gttattatta 900 ttttctatgt ccgttgttgt aagaagaaaa catcagctgc agagggtcca gagctcgtga 960 gcctgcaggt cctggatcaa cacccagttg ggacgagtga ccacagggat gccacacagc 1020 tcggatttca gcctctgatg tcagctcttg ggtccactgg ctccact 1067

<210> 121 <211> 1067 <212> DNA <213> Homo sapiens

<400> 121

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 120 ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180 240 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagca 360 ccaggagete ccagcattte tactatgatg gggagetett ceteteccaa aacgtggaga 420 etgaggaatg gacagtgeec cagteeteea gageteagae ettggeeatg aacgteagga 480 atttettgaa ggaagatgee atgaagacea agacacacta teaegetatg catgeagact gcctgcagga actacggcga tatctagaat ccagcgtagt cctgaggaga acagtgcccc 540 600 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg cttccagctt ctatccccgg aatatcacac tgacctggcg tcaggatggg gtatctttga 660 720 gecaegaeae ceageagtgg ggggatgtee tgeetgatgg gaatggaace taceagaeet gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 840 gegggaatea eageacteae eetgtgeeet etgggaaagt getggtgett eagagteatt ggcagacatt ccatgtttct gctgttgctg ctgctgctgc tgctattttt gttattatta 960 ttttctatgt ccgttgttgt aagaagaaaa catcagctgc agagggtcca gagctcgtga 1020 gcctgcaggt cctggatcaa cacccagttg ggacgagtga ccacagggat gccacacagc 1067 teggatttea geetetgatg teagetettg ggteeaetgg etecaet

<210> 122 <211> 1064 <212> DNA <213> Homo sapiens

## <400> 122

60 gtetteetta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 120 ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa agecceaggg acagtgggca gaagatgtee tgggaaataa gacatgggae agagagacea 180 240 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagca 300 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 360 ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 420 atttettgaa ggaagatgee atgaagacea agacacacta teaegetatg catgeagact 480 geetgeagga actaeggega tatetagaat eeagegtagt eetgaggaga acagtgeece **540** ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg 600 cttccagctt ctatccccgg aatatcatac tgacctggcg tcaggatggg gtatctttga 660 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 720 gggtggccac caggatttgc cgaggagagg agcagaggtt cacctgctac atggaacaca 780 840 gegggaatea eageacteae eetgtgeeet etgggaaagt getggtgett eagagteatt ggcagacatt ccatgtttct gctgttgctg ctgctgctgc tatttttgtt attattattt 960 tctatgtccg ttgttgtaag aagaaaacat cagctgcaga gggtccagag ctcgtgagcc 1020 tgcaggtcct ggatcaacac ccagttggga cgagtgacca cagggatgcc acacagetcg 1064 gatttcagcc tctgatgtca gctcttgggt ccactggctc cact

<210> 123 <211> 1067 <212> DNA <213> Homo sapiens

<400> 123

gtettegtta taaceteaeg gtgetgteeg gggatggate tgtgeagtea gggttteteg 60 120 ctgaggtaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180 gggaettgae agggaaegga aaggaeetea ggatgaeeet ggeteatate aaggaeeaga 240 aagaaggett geatteette eaggagatta gggtetgtga gateeatgaa gacaacagea 300 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacaatgeee cagteeteea gageteagae ettggeeatg aacgteagga 480 atttettgaa ggaagatgee gtgaagacea agacacacta teacgetatg catgeagact 540 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc 600 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 660 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 gegggaatea eageacteae getgtgeeet etgggaaagt getggtgett eagagteatt 840 ggcagacatt ccatgtttct gctgttgctg ctgctgctgc tgctattttt gttattatta 960 ttttctatgt ctgttgttgt aagaagaaaa catcagctgc agagggtcca gagctcgtga 1020 gcctgcaggt cctggatcaa cacccagttg ggacgagtga ccacagggat gccacacagc 1067 teggatttea geetetgatg teagetettg ggteegetgg etecaet

<210> 124 <211> 1061 <212> DNA <213> Homo sapiens

<400> 124

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttetea 120 ctgaggtaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180 240 gagacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagca 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacaatgeee cagteeteea gageteagae ettggeeatg aacgteagga 480 atttettgaa ggaagatgee atgaagacea agacaeteta teaegetatg eatgeagaet gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc 540 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 600 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 660 720 gecacgacae ccagcagtgg ggggatgtee tgeetgatgg gaatggaace taccagacet gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 gegggaatea eageacteae eetgtgeeet etgggaaagt getggtgett eagagteatt 840 ggcagacatt ccatgtttct gctgttgctg ctgctgctat ttttgttatt attattttct atgtccgttg ttgtaagaag aaaacatcag ctgcagaggg tccagagetc gtgagcctgc 960 aggteetgga teaacaccca gttgggacga gtgaccacag ggatgeeaca cageteggat 1020 tteageetet gatgteagat ettgggteea etggeteeae t 1061

<210> 125 <211> 813 <212> DNA

<213> Homo sapiens

<400> 125

tgaggtaca tetggatggt cagecettee tgegetgtga caggeagaaa tgeagggeaa gececaggg acagtgggea gaagatgtee tgggaaataa gacatgggae agagagaees	.120 a 180
agacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga	240
agaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagca	300
caggagete ceageattte tactacgatg gggagetett ceteteccaa aacetggaga	360
tgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga	420
tttettgaa ggaagatgee atgaagacea agacaeteta teaegetatg catgeagaet	480
cetgeagga actaeggega tatetaaaat eeggegtagt eetgaggaga acagtgeece	<b>540</b>
catggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg	600
	660
ccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct	720
ggtggccac caggatttgc caaggagagg agcaaaggtt cacctgctac atggaacaca	780
egggaatea cageaeteae eetgtgeeet etg	813

<210> 126

<211> 812

<212> DNA

<213> Homo sapiens

### <400> 126

60 gtettegtta taaceteaeg gtgetgteeg gggatggate tgtgeagtea gggttteteg 120 etgaggtaca tetggatggt cagecettee tgegetgtga caggeagaaa tgeagggeaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca gggaettgae agggaaegga aaggaeetea ggatgaeeet ggeteatate aaggaeeaga 300 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagca ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 360 ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 420 atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact 480 gcctgcagga actacggcga tatctagaat ccggcgtagt cctgaggaga acagtgcccc 540 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 600 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 660 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct gggtggccac caggatttgc cgaggagagg agcagaggtt cacctgctac atggaacaca 780 812 gegggaatea eageaeteae eetgtgeeet et

<210> 127

<211> 812

<212> DNA

<213> Homo sapiens

# <400> 127

60 gtettegtta taaceteaeg gtgetgteeg gggatggate tgtgeagtea gggttteteg 120 ctgaggtaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagca 360 ccaggagete ccageattte tactacgata gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 480 atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact gcctgcagga actacggcga tatctagaat ccggcgtagt cctgaggaga agagtgcccc ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 660 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca gegggaatea eageaeteae eetgtgeeet et

540 600

720

180

240 300

<211> 969

<212> DNA

<213> Homo sapiens

<400> 128

gtettegtta taaceteaeg gtgetgteeg gggatggate tgtgeagtea gggttteteg 60 120 etgaggtaca tetggatggt cagecettee tgegetgtga caggcagaaa tgeagggcaa agecceaggg acagtgggca gaagatgtee tgggaaataa gacatgggac agagagacca 180 240 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccagcattte tactacgata gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 480 atttcttgaa ggaagatgcc atgaagacca agacacacta tcacgctatg catgcagact 540 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc 600 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 660 cttctggctt ctatccctgg aatatcacac tgagetggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 780 gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 840 gcgggaatca cagcactcac cctgtgccct ctggaaagtg ctggtgcttc agagtcattg  ${\tt gcagacattc}\ {\tt catgtttctg}\ {\tt ctgttgctgc}\ {\tt tgctgctgct}\ {\tt gctgctgctg}\ {\tt ctatttttgt}$ 960 tattattatt ttctacgtct gttgttgtaa gaagaaaaca tcagctgcag agggtccagg 969 gctcgtgag

<210> 129

<211> 1064

<212> DNA

<213> Homo sapiens

<400> 129

gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 60 120 ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180 240 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 480 atttcttgaa ggaagatgcc atgaagacca agacacacta tcacgctatg catgcagact 540 gcctgcagga actacggcga tatctagaat ccagcgtagt cctgaggaga acagtgcccc ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg 600 660 cttccagctt ctatccccgg aatatcatac tgacctggcg tcaggatggg ctatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 780 gggtggccac caggatttgc cgaggagagg agcagaggtt cacctgctac atggaacaca gegggaatea eageacteae eetgtgeeet etgggaaagt getggtgett eagagteatt 840 ggcagacatt ccatgtttct gctgttgctg ctgctgctgc tatttttgtt attattattt 960 tctatgtccg ttgttgtaag aagaaaacat cagctgcaga gggtccagag ctcgtgagcc 1020 tgeaggteet ggateaacae ceagttggga egagtgacea cagggatgee acacageteg 1064 gatttcagcc tctgatgtca gctcttgggt ccactggctc cact

<210> 130

<211> 969

<212> DNA

<213> Homo sapiens

<400> 130

gtettegtta taaceteaeg gtgetgteeg gggatggate tgtgeagtea gggttteteg 60 etgaggtaca tetggatggt eageeettee tgegetgtga eaggeagaaa tgeagggeaa 120 ageeeeaggg acagtgggea gaagatgtee tgggaaataa gacatgggae agagagaeea 180 gggaettgae agggaaegga aaggaeetea ggatgaeeet ggeteatate aaggaeeaga 240

aagaaggett geatteeete egggagatta gggtetgtga gateeatgaa gacaacagea 300 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 420 atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact 480 540 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc 600 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 660 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 780 gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 840 gegggaatea cagcacteae cetgtgeeet etggaaagtg etggtgette agagteattg geagacattc catgtttctg ctgttgctgc tgctgctgct gctgctgctg ctatttttgt 960 tattattatt ttctacgtct gttgttgtaa gaagaaaaca tcagctgcag agggtccagg 969 gctcgtgag

<210> 131 <211> 1061 <212> DNA

<213> Homo sapiens

# <400> 131

Ĵ

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttetea 120 ctgaggtaca tetggatggt cagecettee tgegetgtga caggeagaaa tgeagggeaa 180 agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 240 gagacttgac agggaacgga aaggacetca ggatgaceet ggeteatate aaggaceaga 300 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga atttettgaa ggaagatgee atgaagacca agacacacta teacgetatg catgeagact 480 540 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc 600 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 660 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 720 gecacgacae ecageagtgg ggggatgtee tgeetgatgg gaatggaace taccagacet 780 gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca gegggaatea eageaeteae eetgtgeeet etgggaaagt getggtgett eagagteatt 840 900 ggcagacatt ccatgtttct gctgttgctg ctgctgctat ttttgttatt attattttct 960 atgtccgttg ttgtaagaag aaaacatcag ctgcagaggg tccagagctc gtgagcctgc 1020 aggteetgga teaacaccca gttgggacga gtgaccacag ggatgeeaca cageteggat 1061 ttcagcctct gatgtcagat cttgggtcca ctggctccac t

<210> 132

<211> 997

<212> DNA

<213> Homo sapiens

#### <400> 132

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 120 ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa agececaggg acagtgggca gaagatgtee tgggaaataa gacatgggae agagagacea gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 240 300 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagca 360 ccaggagete ccageattte tactacgatg gggagetett ceteteccaa aacetggaga ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 420 480 atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact gcctgcagga actacggcga tatctagaat ccagcgtagt cctgaggaga acagtgcccc **540** 600 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg 660 cttccagctt ctatccccgg aatatcatac tgacctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 780 gggtggccac caggatttgc cgaggagagg agcagaggtt cacctgctac atggaacaca

gegggaatea cagcacteae cetgtgeeet etgggaaagt getggtgett cagagteatt 840 ggeagacatt ceatgtteet getgttgetg etgetgetge tatttttgtt attattattt 900 tetatgteeg ttgttgtaag aagaaaacat cagetgeaga gggteeagag etegtgagee 960 tgeaggteet ggateaacae ceagttggga egagtgt 997

<210> 133

<211> 963

<212> DNA

<213> Homo sapiens

## <400> 133

60 gtettegtta taaceteaeg gtgetgteeg gggatggate tgtgeagtea gggttteteg ctgaggtaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa 120 180 agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 240 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagca 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 480 atttettgaa ggaagatgee atgaagacea agacacacta teaegetatg catgeagaet 540 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 600 660 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 720 gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 gcgggaatca cagcactcac cctgtgccct ctgggaaagt gctggtgctt cagagtcatt 840 900 ggcagacatt ccatgtttct gctgttgctg ctgctgctgc tgctgctgct gctgctattt 960 ttgttattat tattttctac gtctgttgtt gtaagaagaa aacatcagct gcagagggtc 963 cag

<210> 134

<211> 813

<212> DNA

<213> Homo sapiens

# <400> 134

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttetea 120 ctgaggtaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa agececaggg acagtgggca gaagatgtee tgggaaacaa gacatgggac agagagacca 180 240 gagacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagca 300 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga atttettgaa ggaagatgee atgaagacea agacaeteta teaegetatg eatgeagaet 480 540 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 600 660 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 gegggaatea eageacteae cetgtgeeet etg 813

<210> 135

<211> 813

<212> DNA

<213> Homo sapiens

<400> 135

ctgaggtaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca	120 a 180
gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga	240
aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea	300
ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga	360
ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga	420
atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact	480
gcctgcagga actacggcga tatctagaat ccagcgtagt cctgaggaga acagtgcccc	<b>54</b> 0
ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg	600
cttccagctt ctatccccgg aatatcatac tgacctggcg tcaggatggg gtatctttga	660
gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct	720
gggtggccac caggatttgc cgaggagagg agcagaggtt cacctgctac atggaacaca	780
gegggaatea eageaeteae eetgtgeeet etg	813

<210> 136

<211> 920

<212> DNA

<213> Homo sapiens

## <400>

60 gtettegtta taaceteaeg gtgetgteeg gggatggate tgtgeagtea gggttteteg 120 etgaggtaca tetggatggt eagecettee tgegetgtga eaggeagaaa tgeagggeaa 180 agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 240 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccagcattte tactaegatg gggagetett ceteteccaa aacetggaga ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 420 atttcttgaa ggaagatgcc atgaagacca agacacacta tcacgctatg catgcagact 480 540 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc 600 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 660 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 780 gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 840 gegggaatea eageacteae eetgtgeeet etgggaaagt getggtgett eagagteatt 900 ggcagacatt ccatgtttct gctgttgctg ctggctgctg ctatttttgt tattattatt 920 ttctatgtcc gttgttgtaa

<210> 137

<211> 813

<212> DNA

<213> Homo sapiens

#### <400> 137

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 360 ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga atttettgaa ggaagatgee atgaagacea agacacaeta teacgetatg catgeagact gcctgcagga actacggcga tatctagaat ccggcgtagt cctgaggaga acagtgcccc ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg 660 cttccagctt ctatccccgg aatatcacac tgacctggcg tcaggatggg gtatctttga gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca gegggaatea eageacteae cetgtgeeet etg

120

180

240

300

420 480

540

600

720

780

180

<210> 138 813 <211> DNA <212> <213> Homo sapiens

<400> 138

60 gtetteetta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 120 ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 240 300 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 480 atttettgaa ggaagatgee atgaagacea agacacacta teaegetatg catgeagact gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc 540 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 600 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 660 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 gcgggaatca cagcactcac cctgtgccct ctg 813

<210> 139 <211> 951 <212> DNA <213> Homo sapiens

<400> 139

gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggttteteg 60 ctgaggtaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa 120 agececaggg acagtgggca gaagatgtee tgggaaataa gacatgggae agagagacea 180 240 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccageattte tactacgatg gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 480 atttettgaa ggaagatgee atgaagacea agacacacta teaegetatg catgeagact 540 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc 600 ccatggtgaa tgtcacccgc agtgaggcct cagagggcaa cattaccgtg acatgcaggg cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 660 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 780 gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 840 gegggaatca cagcactcac cetgtgecet etgggaaagt getggtgett cagagtcatt 900 ggcagacatt ccatgtttct gctgttgctg ctgctgctgc tgctattttt gttattatta 951 ttttctatgt ccgttgttgt aagaagaaaa catcagctgc agagggtcca g

<210> 140 <211> 948 <212> DNA <213> Homo sapiens

<400>

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 120 ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa 180 agecceaggg acagtgggca gaagatgtee tgggaaataa gacatgggae agagagacca 240 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 360 420 ctgaggaatg gacagtgeec cagteeteea gageteagae ettggeeatg aacgteagga atttcttgaa ggaagatgcc atgaagacca agacacacta tcacgctatg catgcagact 480

gcetgcagga actacggcga tatctagaat ceggegtagt cetgaggaga acagtgeece catggtgaa tgteaceege agegaggeet cagagggeaa cateacegtg acatgeaggg 600 cttecagett ctateceegg aatateatae tgaeetggeg teaggatggg gtatetttga 660 geeacgacae ceageagtgg ggggatgtee tgeetgatgg gaatggaace taceagacet 720 gggtggeeae caggatttge egaggaggg ageagaggtt cacetgetae atggaacaca 780 geegggaatea cageacteae cetgtgeect etgggaaagt getggtgett cagagteatt 840 ggeagacatt ceatgttet getgttgetg etgetgetge tatttttgtt attattattt 900 tetatgteeg ttgttgtaag aagaaaacat cagetgeaga gggteeag 948

<210> 141

<211> 920

<212> DNA

<213> Homo sapiens

# <400> 141

gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 60 ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa 120 agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180 gggaettgae agggaaegga aaggaeetea ggatgaeeet ggeteatate aaggaeeaga 240 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea 300 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 360 ctgaggaatg gacagtgccc cagtecteca gageteagae ettggecatg aacgteagga 420 atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact 480 gcctgcagga actacggcga tatctagaat ccggcgtagt cctgaggaga acagtgcccc 540 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 600 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 660 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 720 gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 gegggaatea eageacteae eetgtgeeet etgggaaagt getggtgett eagagteatt 840 ggcagacatt ccatgtttct gctgttgctg ctggctgctg ctatttttgt tattattatt 900 ttctatgtcc gttgttgtaa 920

<210> 142

<211> 945

<212> DNA

<213> Homo sapiens

# <400> 142

gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggttteteg 60 ctgaggtaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa 120 agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 240 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea 300 ccaggagete ccagcattte tactaegatg gggagetett ceteteccaa aacetggaga 360 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacatcagga 420 atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact 480 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc 540 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 600 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 660 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 720 gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 gcgggaatca cagcactcac cctgtgccct ctgggaaagt gctggtgctt cagagtcatt 840 ggcagacatt ccatgtttct gctgttgctg ctgctgctat ttttgttatt attattttct 900 atgtccgttg ttgtaagaag aaaacatcag ctgcagaggg tccag 945

<210> 143

<211> 813

<212> DNA

#### <213> Homo sapiens

<400> 143

60 gtettegtta taaceteaeg gtgetgteeg gggatggate tgtgeagtea gggttteteg 120 etgaggtaca tetggatggt cagecettee tgegetgtga caggeagaaa tgeagggeaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180 240 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagea ccaggagete ccageattte tactacgatg gggagetett ceteteccaa aacetggaga 360 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 420 atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact 480 540 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 600 660 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 780 gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 813 gegggaatea eageacteae getgtgeeet etg

<210> 144

<211> 813

<212> DNA

<213> Homo sapiens

## <400> 144

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 120 etgaggtaca tetggatggt eagecettee tgegetatga eaggeagaaa tgeagggeaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 240 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea 300 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 420 ctaaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 480 atttcttgaa ggaagatgcc atgaagacca agacacacta tcacgctatg catgcagact gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc **540** ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 600 660 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 720 gecaegacae ceageagtgg ggggatgtee tgeetgatgg gaatggaace taccagacet gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 gegggaatea eageacteae eetgtgeeet etg 813

180

120

420

540

600

720

780

180

240 300

<210> 145

<211> 813

<212> DNA

<213> Homo sapiens

#### <400> 145

gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 60 ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagca ccaggagete ccageattte tactacgatg gggagetett ceteteccaa aacetggaga 360 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 480 atttettgaa ggaagatgee atgaagacea agacaeteta teaegetatg catgeagaet gcctgcagga actacggcga tatctaaaat ccagcgtagt cctgaggaga agagtgcccc ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 660 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca

# gcgggaatca cagcactcac cctgtgccct ctg

813

<210> 146 <211> 948 <212> DNA

WO 2005/063985

<213> Homo sapiens

#### <400> 146

gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 60 ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa 120 agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 240 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea 300 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggagt 360 ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 420 atttettgaa ggaagatgee atgaagacea agacacacta teaegetatg catgeagact 480 gcctgcagga actacggcga tatctagaat ccagcgtagt cctgaggaga acagtgcccc 540 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg 600 cttccagctt ctatccccgg aatatcatac tgacctggcg tcaggatggg gtatctttga 660 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 720 gggtggccac caggatttgc cgaggagagg agcagaggtt cacctgctac atggaacaca 780 gcgggaatca cagcactcac cctgtgccct ctgggaaagt gctggtgctt cagagtcatt 840 ggcagacatt ccatgtttct getgttgctg ctgctgctgc tatttttgtt attattattt 900 tctatgtccg ttgttgtaag aagaaaacat cagctgcaga gggtccag 948

<210> 147 <211> 813 <212> DNA <213> Homo sapiens

#### <400> 147

gtettegtta taaceteaeg gtgetgteeg gggatggate tgtgeagtea gggttteteg 60 ctgaggtaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa 120 agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 240 aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagea 300 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 360 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 420 atttettgaa ggaagatgee gtgaagacea agacacacta teacgetatg catgeagact 480 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc 540 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg 600 cttccagctt ctatccccgg aatatcacac tgacctggcg tcaggatggg gtatctttga 660 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 720 gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 gcgggaatca cagcactcac cctgtgccct ctg 813

<210> 148 <211> 813 <212> DNA <213> Homo sapiens

# <400> 148

gtcttcgtta taacctcacg gtgctgtccg gggatggatc tgtgcagtca gggtttctcg 60 ctgaggtaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa 120 agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 240 aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagea 300

WO 2003/003983	141/102	1 (1/31 2
ccaggagete ccagcattte tactacgatg ggg etgaggaatg gacaatgeee cagteeteea gag atttettgaa ggaagatgee atgaagaeea ag geetgeagga actacggega tatetaaaat eeg ecatggtgaa tgteaceege agegaggeet eag etteeagett etateeegg aatateatae tgaee geeacgaeae ecagcagtgg ggggatgtee tge gggtggeeae caggatttge egaggagagg ag gegggaatea eageacteae eetgtgeeet etg	geteagae ettggeeatg aacgteagga acacacta teacgetatg catgeagaet gegtagt cetgaggaga acagtgeece agggeaa cateacegtg acatgeaggg etggeg teaggatggg gtatetttga eetgatgg gaatggaace taccagacet	360 420 480 540 600 660 720 780 813
<210> 149 <211> 813 <212> DNA <213> Homo sapiens		·
<400> 149 gtcttcgtta taacctcacg gtgctgtccg gggaactgaggtaca tctggatggt cagcccttcc tgcg agccccaggg acagtgggca gaagatgtcc tggggacttgac agggaacgga aaggacctca ggaagaaggct gcattccctc caggagatta gggaccaagagct ccagcatttc tactacgatg gggactgaggaatg gacaatgcc cagtcctcca gagatttettgaa ggaagatgcc atgaagacca agagcctgcagga actacggcga tatctagaat ccacatggtgaa tgtcacccgc agcgaggcct cagccttctggctt ctatccctgg aatatcacac tgaggaccacgacac ccagcagtgg ggggatgtcc tgcgggtggccac caggatttgc caaggagagg aggggggaatca cagcagtcac cctgtgccct ctg	etgtga caggcagaaa tgcagggcaa ggaaataa gacatgggac agagagacc gatgaccet ggctcatatc aaggaccaga tetgtga gatccatgaa gacaacagca agetett ceteteccaa aacetggaga etcagac ettggccatg aacgtcagga acacacta tcacgetatg catgcagact gcgtagt cetgaggaga acagtgcccc agggcaa cattacegtg acatgcaggg tggcg tcaggatggg gtatetttga etgatgg gaatggaace taccagacet	60 120 a 180 240 300 360 420 480 540 600 660 720 780 813
<210> 150 <211> 813 <212> DNA <213> Homo sapiens	, ,	
<400> 150 gtcttcgtta taacctcacg gtgctgtcct gggatgctgggggggggg	tgtga caggcagaaa tgcagggcaa gaaataa gacatgggac agagagacca atgaccct ggctcatatc aaggaccaga cetgtga gatccatgaa gacaacagca getett ceteteccaa aacetggaga etcagac ettggccatg aacgtcagga cacacta tcacgetatg catgcagact getagt cetgaggaga acagtgcccc gggcaa catcacegtg acatgcaggg	60 120 a 180 240 300 360 420 480 540 600

cttccagctt ctatccccgg aatatcatac tgacctggcg tcaggatggg gtatctttga

gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct

gggtggccac caggatttgc cgaggagagg agcagaggtt cacctgctac atggaacaca

660

720

780

813

<210> 151 <211> 813

<212> DNA

<213> Homo sapiens

gcgggaatca cagcactcac cctgtgccct ctg

180

120 180

240

300

420

480

540

600

720

780

813

<400>	151	

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggttteteg ctgaggtaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa 120 agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180 240 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea 300 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 360 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 420 atttcttgaa ggaagatgcc atgaagacca agacacacta tcacgctatg catgcagact 480 geetgeagga actaeggega tatetaaaat eeggegtagt eetgaggaga acagtgeece 540 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg 600 660 cttccagctt ctatccccgg aatatcacac tgacctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 780 gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 813 gcgggaatca cagcactcac cctgtgccct ctg

<210> 152

<211> 813

<212> DNA

<213> Homo sapiens

## <400> 152

gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggttteteg 60 120 etgaggtaca tetggatggt eagecettee tgegetgtga eaggeagaaa tgeagggeaa agececaggg acagtgggca gaagatgtee tgggaaataa gacatgggae agagagacea gggaettgae agggaaegga aaggaeetea ggatgaeeet ggeteatate aaggaeeaga 240 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagca 300 ccaggagete ccageattte tactacgatg gggagetett ceteteccaa aacetggaga 360 420 ctgaggaatg gacaatgeee cagteeteea gageteagae ettggeeatg aacgteagga atttcttgaa ggaagatgcc atgaagacca agacacacta tcacgctatg catgcagact 480 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc 540 600 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg 660 cttccagctt ctatccccgg aatatcatac tgacctggcg tcaggatggg ctatctttga gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 720 780 gggtggccac caggatttgc cgaggagagg agcagaggtt cacctgctac atggaacaca 813 gegggaatea eageacteae cetgtgeeet etg

<210> 153

<211> 813

<212> DNA

<213> Homo sapiens

## <400>

gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggttteteg 60 ctgaggtaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga ctaaggaatg gacaatgeec cagteeteea gageteagae ettggeeatg aacgteagga atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 660 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca gcgggaatca cagcactcac cctgtgccct ctg

180

180

240

780

120

180

240

300

480

240

```
<210>
       154
<211>
       960
<212>
       DNA
<213>
       Homo sapiens
```

#### <400> 154

60 gtettegtta taaceteaeg gtgetgteeg gggatggate tgtgeagtea gggttteteg 120 ctgagggaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccageattte tactacgatg gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 480 atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc 540 600 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 660 cttetggett etatecetgg aatateaeae tgagetggeg teaggatggg gtatetttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 840 gegggaatea eageacteae eetgtgeeet etgggaaagt getggtgett eagagteatt ggcagacatt ccatgtttct gctgttgctg ctgctgctgc tgctgctgct gctatttttg 900 960 ttattattat tttctacgtc tgttgttgta agaagaaaac atcagctgca gagggtccag

<210> 155 <211> 813 <212> DNA

<213> Homo sapiens

# <400>

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 120 ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea  ${\tt ccaggagctc}\ {\tt ccagcatttc}\ {\tt tactacgatg}\ {\tt gggagctctt}\ {\tt cctctcccaa}\ {\tt aacctggaga}$ 360 420 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga atttettgaa ggaagatgee atgaagacea agacacaeta teaegetatg catgeagaet 480 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc 540 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg 600 660 cttccagctt ctatccccgg aatatcatac tgacctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct gggtggccac taggatttgc cgaggagagg agcagaggtt cacctgctac atggaacaca 813 gcgggaatca cagcactcac cctgtgccct ctg

<210> 156 <211> 945 <212> DNA

<213> Homo sapiens

# <400>

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggttteteg etgaggtaca tetggatggt cagecettee tgegetgtga caggeagaaa tgeagggeaa agececaggg acagtgggea gaagatgtee tgggaaataa gacatgggae agagagacea gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagca 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga atttettgaa ggaagatgee atgaagacea agacaegeta teaegetatg catgeagaet

gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc	540
ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg	600
cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga	660
gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct	720
gggtggccac caggatttgc caaggagagg agcagagttt cacctgctac atggaacaca	780
gcgggaatca cagcactcac cctgtgccct ctgggaaagt gctggtgctt cagagtcatt	840
ggcagacatt ccatgtttct gctgttgctg ctgctgctat ttttgttatt attattttct 90	0
atgtctgttg ttgtaagaag aaaacatcag ctgcagaggg tccag	945

<210> 157 <211> 813 <212> DNA <213> Homo sapiens

## <400> 157

gtettegtta taaceteaeg gtgetgteeg gggatggate tgtgeagtea gggttteteg 120 ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa 180 agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 240 300 aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccageattte tactaegatg gggagetett ceteteccaa aaegtggaga 420 ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact 480 gcctgcagga actacggcga tatctagaat ccagcgtagt cctgaggaga agagtgcccc 540 600 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg cttccagctt ctatccccgg aatatcacac tgacctggcg tcaggatggg gtatctttga 660 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 720 780 gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 813 gegggaatea eageacteae cetgtgeeet etg

<210> 158 <211> 945 <212> DNA <213> Homo sapiens

# <400> 158

gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggttteteg 120 ctgaggtaca tetggatggt cagecettee tgegetgtga caggeagaaa tgeagggeaa 180 agececaggg acagtgggca gaagatgtee tgggaaataa gacatgggae agagagacea gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 240 300 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 480 atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact 540 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc 600 ccatggtgaa tgtcacccgc agtgaggcct cagagggcaa cattaccgtg acatgcaggg 660 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 720 gecacgacae ceageagtgg ggggatgtee tgeetgatgg gaatggaace taccagacet 780 gggtggccac caggatttgc gaaggagagg agcagaggtt cacctgctac atggaacaca 840 gegggaatea eageacteae eetgtgeeet etgggaaagt getggtgett eagagteatt 900  ${\tt ggcagacatt\;ccatgtttct\;gctgttgctg\;ctgctat\;ttttgttatt\;attattttct}$ 945 atgtccgttg ttgtaagaag aaaacatcag ctgcagaggg tccag

<210> 159 < 211> 960

<212> DNA

<213> Homo sapiens

900

960

<400> 159 60 gtettegtta taaceteaeg gtgetgteeg gggatggate tgtgeagtea gggttteteg 120 etgaggtaca tetggatggt cagecettee tgegetgtga caggeagaaa tgeagggeaa agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 240 300 aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea ccaggagete ccageattte tactacgatg gggagetett ceteteccaa aacetggaga 360 420 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 480 atttettgaa ggaagatgee atgaagacea agacacacta teacgetatg catgeagact gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc **540** ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 600 cttctggctt ctgtccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 660 720 gecaegacae ceageagtgg ggggatgtee tgeetgatgg gaatggaace taceagacet gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 gegggaatea eageacteae eetgtgeeet etgggaaagt getggtgett eagagteatt 840

ggcagacatt ccatgtttct gctgttgctg ctgctgctgc tgctgctgct gctatttttg

ttattattat tttctacgtc tgttgttgta agaagaaaac atcagctgca gagggtccag

<210> 160 <211> 951

<212> DNA

<213> Homo sapiens

<400> 160

gtettegtta taaceteaeg gtgetgteeg gggatggate tgtgeagtea gggttteteg 60 120 ctgagggaca tctggatggt cagcccttcc tgcgctgtga caggcagaaa tgcagggcaa 180 agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 240 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagca 300 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacaatgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 480 atttettgaa ggaagatgee atgaagaeea agacaeacta teaegetatg catgeagaet 540 gcctgcagga actacggcga tatctaaaat ccggcgtagt cctgaggaga acagtgcccc 600 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa cattaccgtg acatgcaggg 660 cttctggctt ctatccctgg aatatcacac tgagctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 780 gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 840 gegggaatea eageacteae getgtgeeet etgggaaagt getggtgett eagagteatt 900 ggcagacatt ccatgtttct gctgttgctg ctgctgctgc tgctattttt gttattatta 951 ttttctatgt ctgttgttgt aagaagaaaa catcagctgc agagggtcca g

<210> 161

<211> 1064

<212> DNA

<213> Homo sapiens

<400> 161

60 gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 120 etgaggtaca tetggatggt cagecettee tgegetatga caggeagaaa tgeagggeaa 180 agccccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 240 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 300 aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagea 360 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacetggaga 420 ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 480 atttettgaa ggaagatgee atgaagacca agacacacta teacgetatg catgeagact gcctgcagga actacggcga tatctagaat ccggcgtagt cctgaggaga acagtgcccc 540 600 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg cttccagctt ctatccccgg aatatcatac tgacctggcg tcaggatggg gtatctttga 660

gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct	720
gggtggccac caggatttgc cgaggagagg agcagaggtt cacctgctac atggaacaca	780
gcgggaatca cagcactcac cctgtgccct ctgggaaagt gctggtgctt cagagtcatt	840
ggcagacatt ccatgtttct gctgttgctg ctgctgctgc tatttttgtt attattattt 90	00
tctatgtccg ttgttgtaag aagaaaacat cagctgcaga tggtccagag ctcgtgagcc	960
tgcaggtcct ggatcaacac ccagttggga cgagtgacca cagggatgcc acacagctcg	1020
gatttcagcc tctgatgtca gctcttgggt ccactggctc cact	1064

<210> 162

<211> 1067

<212> DNA

<213> Homo sapiens

<400> 162

gtettegtta taaceteaeg gtgetgteet gggatggate tgtgeagtea gggtttettg 60 ctgaggtaca tctggatggt cagcccttcc tgcgctatga caggcagaaa tgcagggcaa 120 ageceeaggg acagtgggca gaagatgtee tgggaaataa gacatgggae agagagacca 180 gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga 240 aagaaggett geatteeete caggagatta gggtetgtga gateeatgaa gacaacagca 300 ccaggagete ccagcattte tactacgatg gggagetett ceteteccaa aacgtggaga 360 ctgaggaatg gacagtgeec cagteeteea gageteagae ettggeeatg aacgteagga 420 atttcttgaa ggaagatgcc atgaagacca agacacacta tcacgctatg catgcagact 480 gcctgcagga actacggcga tatctagaat ccagcgtagt cctgaggaga acagtgcccc 540 ccatggtgaa tgtcacccgc agcgaggcct cagagggcaa catcaccgtg acatgcaggg 600 660 cttccagctt ctatccccgg aatatcacac tgacctggcg tcaggatggg gtatctttga 720 gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780 gegggaatea eageacteae eetgtgeeet etgggaaagt getggtgett eagagteatt 840 ggcagacatt ccatgtttct gctgttgctg ctgctgctgc tgctattttt gttattatta 960 ttttctatgt ccgttgttgt aagaagaaaa catcagctgc agagggtcca gagctcgtga 1020 gcctgcaggt cctggatcaa cacccagttg ggatgagtga ccacagggat gccacacagc 1067 teggatttea geetetgatg teagetettg ggteeaetgg etecaet